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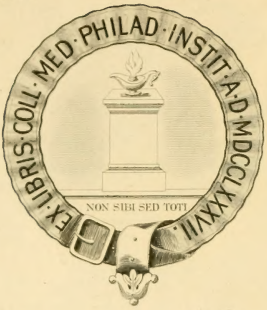

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Presented by

H. A. Hare, M.D.

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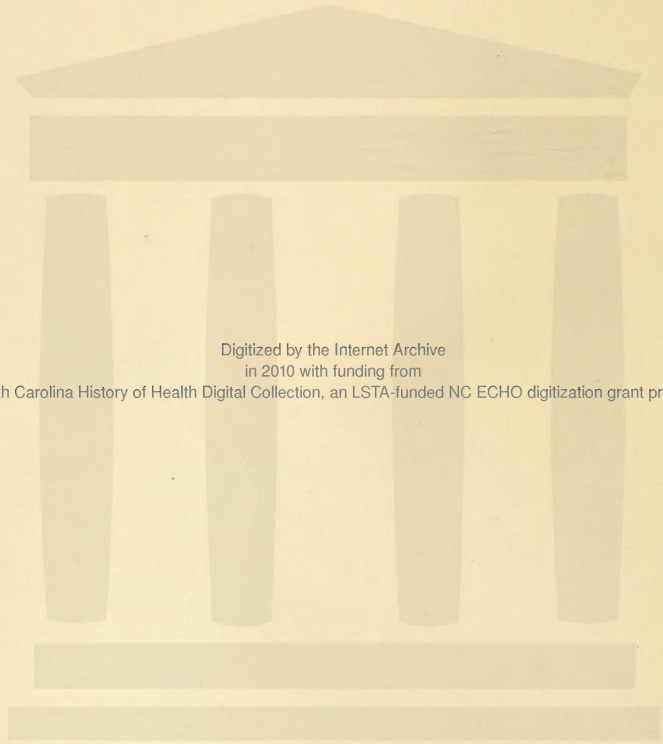

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VOL. XIX. JULY, 1901. No. 1.

The Charlotte Medical Journal.

A MONTHLY JOURNAL OF MEDICINE AND SURGERY.

EDITED BY E. C. REGISTER, M. D., AND J. C. MONTGOMERY, M. D.,

CHARLOTTE, N. C.

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SAMPLES AND LITERATURE UPON RECEIPT OF PROFESSIONAL CARD

MAY 13 1902

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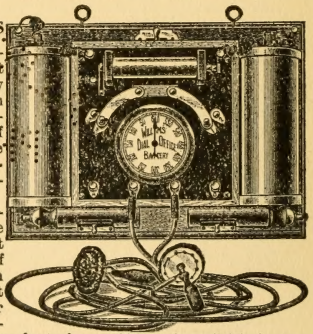

The coil, switches, dial and binding posts on this instrument are mounted on a finely polished slate base about seven inches square. This plate is mounted on a highly polished oak base, a little over fourteen inches long and ten inches wide. The two large dry batteries used in operating it are inclosed in nickel-plated tubes on either side of the slate plate. The raised compartment underneath the slate plate is used to hold the electrodes and attachments when the apparatus is not in use. The dial is regulated by a tube which slides over the coil.

This apparatus is the most attractive instrument I manufacture. It is an ornament to any physician's office. The workmanship can not be excelled. It is so arranged that the dry cells can be removed by the physician, or cells of other makes can also be used in the apparatus. I furnish with this apparatus a pair of conducting cords, more that two yards in length, insulated with flexible rubber quarter inch tubing. I also furnish with it a pair of heavily nickel-plated handles, two sponge electrodes and a large aluminum foot plate. The price of this instrument with the dry cells adjusted, complete, ready for use, with the attachments mentioned above, is **$16.00.**

SPECIAL OFFER: I allow physicians a discount of 10 per cent. on this instrument, and I will ship it C. O. D. with privilege of examination to any physician in the United States. I will pay express charges.

PERCY G. WILLIAMS, Manufacturer,

Office and Salesroom, 6 BARCLAY STREET, NEW YORK, N. Y.

The Charlotte Medical Journal.

VOL. XIX. CHARLOTTE, N. C., JULY, 1901. No. 1.

Rheumatism. *

By W. P. Whitington, Asheville, N. C.

The word Rheumatism as popularly used may be applied to all conditions of the joints when there is pain, soreness, swelling or limpation of motion. More generally the term may be applied to certain inflamatory lesions of the muscels, skin, heart and the cerous members, and the tonsils. We also see the word used in connection with inflamation of joints complicating Gonorrhæa, Scarlatina, Measels and other infections diseases when in reality the trouble is due to entirely different cause.

Rheumatism proper then is divided into acute and chronic articular and muscular rheumatism,

The most common factors in the etiology of rheumatism are heredity, age, climate, and season. A tendency to contract rheumatism is undoubtedly transmitted from parent to child, rendering these more liable to contract the disease under the least exciting conditions. Acute rheumatism is pre-eminently a disease of youth and young adults, but, of course, the chronic may extend into advanced adult life or old age. Cold damp climates, or the cold wet seasons of any climate, are most favorable for the development of rheumatism.

Besides these, other causes are mentioned as sex, soil, occupation, suddenly checking excretions, etc.

By far the most important question in the consideration of rheumatism is the pathology, for on this depends its intelligent and successful treatment. The main contention now seems to be between the chemical and the infection theory. The chemical theory has its advocates, who are divided into those favoring the lactic acid, and the other favoring the uric acid diathesis.

Among those favoring the lactic acid theory are Prout, Richardson, Porter and Sir Dyce, Duckworth, while Latham believes in the uric acid theory, but thinks it must be aided by the presence of lactic acid in the blood. Alexander Haig, who has spent a great deal of time in the investigation of this subject, believes that an excess of uric acid in the blood is the cause of rheumatism in all its forms. Along with Haig on the uric acid theory are many others of high authority.

But since bacteriology has become a means of diagnosis, rheumatism is regarded by many as a specific infectious disease due to a specific micro-organism, which when once developed can reproduce the disease in any subject independent of any other cause or condition, but at the same time more fertile in certain fields or media. This theory was first advocated by Hunter, and later by Bertholen, Macklagan, Guttman, Sahli, and others of the most progressive investigators of the present day. Poynton and Paine in their very elaborate investigations lately, found in several successive cases of acute rheumatism a diplococcus growing in liquid media in strepto-cocal chains. This organism seemed to grow best in a liquid medium of milk or bullion rendered slightly acid with lactic acid. Wasserman, of Berlin, has also succeeded in isolating a streptococcus from the blood and various viscera in the case of a girl who died from endocarditis, nephritis and chorea following a poly-articular rheumatism. Injection of small doses of the pure culture of this streptococcus into the blood of rabbits invariably produced typical and usually fatal poly-arthrits a specific streptococcus can, therefore, be considered as certain. It will remain an object of investigation for the near future to determine if similar micro-organisms cannot be found in muscular rheumatism.

Considering the different theories of the pathology of rheumatism it wound seem that the treatment would be easy. If it is of chemical origin a remedy that would neutralize that chemical or eliminate it from the system ought to cure the disease or at least relieve the symptoms. If the disease is due to a specific micro-organism, then something to destroy those organisms and stop their formation would naturally cure the disease. But this is not so easy as it at first appears.

The remedies and methods of treatment by hygiene and diet are almost as numerous as the authors themselves. One will tell you to wear flannel, another cotton or linen. One says dress warmly, another

*Read before the Buncombe County Medical Sciety.

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says keep cool. One says drink water, another keep dry. One recommends milk and farinaceous soups, another meats and vegetables, while a third wants a full mixed liberal diet. When it comes to medicines they are indeed very numerous.

I will not go into a minute discussion of all the remedies and methods, but will give what seems to me to be the best methods in the majority of cases.

In all acute attacks the diet should, of course, be regulated pretty much as we would in other febrile diseases. The bowels should be kept open with salines, the patient made comfortable in bed and salicylate of soda should be given in fifteen or twenty grain doses every four hours during twelve hours each day, until the pain and fever have subsided, then fifteen grains three times a day until the patient is convalescent, or the disease becomes chronic. I get the very best results from a combination of fifteen grains of salicylate of soda with fifteen grains of acetate of potassium three times a day. The swollen joints should be kept from drafts and may be wrapped in flannels. Any volatile liniment containing 10 per cent. oil gaultheria, or sweet birch, may be applied with benefit. The same methods may be pursued in acute muscular rheumatism. When the disease has become sub-acute or chronic, other remedies may be used with advantage. Potassium iodide with vegetable tonic alteratives, stillingia, poke root, dandelion, prickly ashe, and where the patient is decidedly anæmic, iron and arsenic. In the chronic stage we get good results from hot sulphur baths, hot dry air at three to five hundred Fah., massage, Swedish movement and galvanism.

In chronic or relapsing muscular rheumatism there is nothing so good as massage properly applied. This should be applied energetically to the points of induration or infiltration, which can always be found in the muscels affected, and which will readily clear up under the massage which, however, is greatly aided by the hot dry air treatment for thirty minutes before the massage.

DISCUSSION.

Dr. Glenn.—The doctor spoke of heredity being a predisposing factor in the case of any rheumatic diathesis. I heartily agree with him in that, but I think it is extremely rare that we ever see a case of inflammatory rheumatism in a child under six and a man over fifty, and so far as the specific infection of inflammatory rheumatism, I believe it. It is rarely ever that we see a case of acute inflammatory rheumatism that we do not see first the tonsils sore and inflamed, and a history of sore throat preceding the attack of rheumatism. I remember once hearing J. M. DeCosta discuss that. He had a number of cases in the clinic, and recited directly a history of sore throat preceding the subsequent attack on the joints. I believe as a predisposing factor besides heredity is the puerperal state, and acute infections like scarlatina, typhoid fever, etc. So far as the treatment is concerned, I agree with the doctor that there are as many remedies as there are authors, but I believe in acute inflammatory rheumatism, to get the better results, on first beginning on large doses of salicylate soda and then administering as the doctor gave. If you see no diminishing of the pain and swelling, I believe in putting them on very large doses of alkaloids. For local treatment liniments are good, but I frequently find small blisters in the neighborhood of the joint; not directly over the swelling, but a little removed, something like the size of a dollar, with an intervening space of about the same size. Very frequently ice applied to the joints gives as much relief as any local treatment we can apply. Of course we all recognize that the pain is due to the swelling of the tissue or the abrasion of the tissue, and the stretching of the fibre of the tissue and the pressure of the nerve. The coal tar products have been used extensively to relieve pain, but lately I have tried thermol, which has no depressing effect on the heart, so far as I have been able to recognize, and in my opinion, is a much safer remedy than large doses of antipyrine. I believe in giving the patient plenty of water—alkaline mineral waters. What I speak of now is the acute attack. In chronic rheumatism potassium of iodide frequently gives relief, when the iodides have failed. Massage is better adapted to the chronic form where there is inflammation of the joints. I do not understand by the doctor's definition that any inflammation or swelling of any joint can be termed inflammatory rheumatism. We have many forms of swelling of the joints—that is gout and various inflammations that the defininition does not cover at all.

Dr. H. B. Weaver.—There are three theoriests contending for the mastery in the treatment of rheumatism at present—the chemical, the neural and the infectious. I believe the ancients were not far wrong when they used to say we had rheumatic fever, as well as when they said we had pneumonic fever. I believe that rheumatism is caused assuredly by the entrance into the system, by some means, of a pathogenic micro-organism. The portal is

most probably through the tonsils. I believe it is an infectious disease from the fact that the disease is endemic and many times epidemic; that it is self-limited, like other infectious diseases; that it has cencacytosis attending it, and that it behaves itself in reference to the joints like scarlet fever and the like diseases, which all go to point that it is infectious in its nature, and assuredly it is, so far as our successful treatment hitherto has been. I have had the sad experience of treating it, and under my best efforts the treatment of the "old six weeks in bed" was the best. Creosote and the derivatives have been in my hands most successful. The carbonate of guiaicol is the best. It is tasteless and odorless, and I have never found the stomach that would not take it. The other treatment—external application with cotton or wool applied, keeping the joints well protected from drafts, with good nutritious diet, excluding as much as possible the sugars and starches, giving plenty of water as a diuretic upon the kidneys, where there is anemia, giving plenty of iron and arsenic, because the tendency is to thin the blood; whereas we ought to build the system up as much as possible with tonics and good hygienic treatment. This has been my mode of procedure in this disease. With reference to the different divisions of rheumatism, I believe that gonnorheal rheumatism is a misnomer. It is simply a specific infection of the joints caused by gonococcus. Muscular rheumatism are different manifestations in different parts of the body, which should be treated the same as acute rheumatism.

Dr. Fletcher.—I agree with Dr. Glenn in regard to the mode of entrance into the system of this specific germ entering through the upper air passages; and recently I have seen a case of rheumatism following an operation of the turbinates. I think there is one thing to be considered in these operations. In an operation in the cavities it is one of the complications which may arise if the patient is predisposed to rheumatism. I believe the germ gets in through the tonsil and upper air passages. I do not know that I have authority to back me up, but that is my belief.

Dr. Ballard.—It would not be anything strange if there should be a complication of rheumatism after an operation, and simply the fact that the doctor has seen a case of rheumatism following a complicated operation of the nose would not be the cause of the rheumatism.

Acromegalia.*

By Dr. T. L. Cornwell, Rock Hill, S. C.

I have chosen the subject of Acromegalia for this occasion because it is rare and unique. While we are liable to encounter it at any time, many professional men pass through the career of their entire professional lives without having the privilege of treating or of seeing the disease. Therefore, through the kindness of Dr. R. L. Moore, I have secured the consent of this gentleman to present himself here to-night. Mr. Johnson (a patient of Dr. Moore's), whom I now present to you, has the affection known as acromegalia in its most characteristic form; and my object for desiring his presence here is to facilitate our study, promote discussion and investigation, as well as to amplify our knowledge of this hitherto rare and obscure affection. Patho-anatomical research up to the present time has been very meagre indeed, and our text books have little or nothing pertaining to the subject. The history of this case, elicited from Mr. J. himself, and detailed as graphically as his modesty would permit, is as follows:

He was born and reared in this State on a farm; attended the schools of the community with an average degree of progress (and you will remember that the educational facilities were meagre, or rather in a primative state, in the rural districts forty or fifty years ago). Mr. J. is 51 years old. His family history reveals nothing in common to attract attention or cause comment. He has a son, however, who is beginning to show evidence of the affection, at the age of 17. The matilary bone of this young man would attract the attention of any practical and observing medical man. The angles of the jaw are protruded considerably more than normal. Mr. J., the subject of this paper, grew up to manhood a stout, robust fellow, but there was nothing in his physical appearance to attract the attention of his friends till his thirty-fifth year had been reached. Now, if you will notice the ovoid appearance of his face, with the broader end downward, you see a characteristic of the affection. The ears, eye-lids, lips and tongue are particularly broadened and enlarged. These characteristics, together with his hands, which are twice their natural size regarding breadth, as also, you will notice his feet, are still more enlarged. He states that No. 8 shoes were worn up to his thirty-

*Read before the Rock Hill, S. C., Medical Society May 6, 1901.

fifth year; and since that time he has gradually increased the size, till now he can wear nothing less than 13's with comfort. He has what he supposes to be rheumatism; also somnolence, headache and some defect in vision. The senses of hearing and smelling are not appreciably affected.

Acromegalia, as defined by Osler, is a "dystrophy characterized by abnormal processes of growth, chiefly of the bones of the face and extremities." The term was introduced by Marie, signifying large extremities. It is also known as Marie's disease.

Etiology: Nothing definite is known of the cause of the disease. Osler, quoting Sousa Leite, states that the disease occurs more frequently in females than males, while other authorities claim that both sexes are alike affected. It is confined to no particular nationality—all being equally affected. The disease has baffled, while inviting curious research. Marie, about the year 1886, made an exhaustive comparative research, and it appears to have been due to he and Erb that we are indebted for the greater part of the facts chronicled in our more recent text books. A few others have written less extensively concerning acromegalia, but we are yet to learn what is to be definitely known concerning this strange affection. Up to the present time the number of cases recorded (since Marie's investigation in '86 of the first two recognized) approximate three hundred. After observing by similarities Marie was enabled to associate the symptoms complex with a hypertrophy of the pituitary body. Some authorities state that acromegalia is analogous to myxoedema; that the disease acromegalia bears the same relation to the hypophysis as myxoedema does to the thyroid gland. Arnold, of Heidelberg, is accredited with publishing the most exhaustive anatomical study, which was clinically described by Friedreich and Erb. Altogether, there is much confusion concerning the different suppositions of the various authors. In the diagnosis acromegalia must be carefully separated from the osteitis deformans of Paget, in which the shafts of the long bones are chiefly involved; and in the head, the bones of the cranium, but not those of the face. In Paget's Disease the face is triangular with base upward; in acromegalia it is ovoid with large end downward, while in myxoedema it is round and full-moon shaped according to Osler. Surgeon General U. S. A. Sternberg is quoted as saying that all cases of giant growths are of acromegaliac origin; but Osler admonishes us not to confound acromegalia with the so-called giant growths, the congenital or progressive hyperthrophies of a single number in which the various proportions are maintained.

The age at which acromegalia is supposed to most frequently occur is twenty-five years, though sometimes as late as forty. Infants have been known to contract the disease, and a case is above sixty is recorded; while one eminent authority states that no age is exempt. The pituitary body is regularly found to be diseased; changes in the secretions of the thyroids, hypertrophy or atrophy, rarely normal, changes in the sympathetic nerves and ganglia. On the other hand, the normal functions of the pituitary body is absolutely unknown. That it has been found hypertrophied, absent, etc., without the symptoms of acromegalia, is likewise proven, and thus an accidental coincidence of its disease in these cases lends only to an hypothesis. Of other ductless glands it has been proven that not one in the body but has been diseased in some of these cases, and it is probable they are only of secondary importance in accounting for the phenomena of acromegalia. According to the theory of the importance of the pituitary body in the treatment of the disease has gained some adherents and advocates, and not without good reason to substantiate the adoption of the course.

Marinesco reports three cases treated by means of the administration of tablets of the desecrated gland. In two of which, one of each sex, there was amelioration of the headache and distinct lessening in the the size of the extremities. He thought it probable that the diseased pituitary gland had undergone diminution of size under the treatment. However, since this appears to offer the most potent means of arresting and probably permanently effecting a cure, it behooves us to give it a more extensive trial; yet it is unfortunate that the remedy is to difficult to obtain. In consequence of the rheumatoid symptoms invariably complained of, the enlarged bones, etc., alteratives naturally would be suggested to the mind as appropriate treatment; however, the experience of those who have tried them has been negative. Caffeine and therine seems to overcome temporarily the somnolence. Enalgine and other coal tar derivatives give relief to the pain and opiates while, perhaps, giving better results in that respect, are extremely hazardous in consequence of the permanency of the drug being demanded.

Dr. Johnson suffers greatly with rheuma-

toid symptoms, and is troubled with somnolence to a considerable extent, but thus far he has taken very little medication. Vertigo is a symptom often complained of, and requires something to combat it.

Mr. J. looks to be a man of unusual physical strength, but his wife states that he does not possess the third of the physical vigor he was wont to exhibit prior to the symptoms of the disease. In reference to the sexual organs, he states that there is no appreciable change, and that his sexual appetite or propensity for sexual indulgence is rather intensified than otherwise. The latter statement, however, does not coincide with that of his wife's previously quoted. As a rule, persons thus afflicted are very sensitive in regard to their condition, and it is with much difficulty that they can be induced to answer questions without considerable evasion and more or less incorrectness. This paper must necessarily appear cursory and incomplete since so little has been written concerning it.

P. S.—The ears of the subject (Mr. Johnson) above alluded to are becoming ossified. T. L. C.

The "Knox Improved Monk's" Needle Holder.

By A. W. Knox, M.D., Raleigh, N. C.

Some months ago I was using a Monk's needle-holder, the *jaw*-grip of which impressed me as superior to that of any I had hitherto used; but its handle was disappointing and unsatisfactory.

Having used Matthieu's instrument for several years with satisfaction, it at once occurred to me to unite, in one instrument, the Monk's good *jaw* with the automatic handle-lock of Matthieu—a combination which seemed ideal, and which works to perfection.

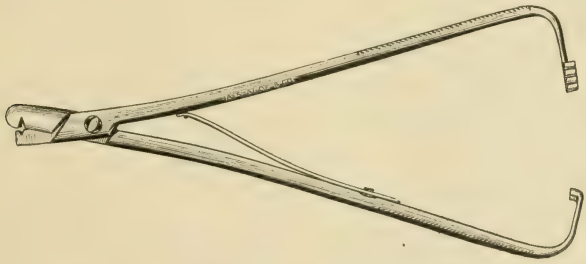
I am indebted to the Messrs. A. S. Aloe Co., of St. Louis, for embodying my conception in what seems to me a perfect instrument for ordinary work, and also for the accompanying electrotype illustration, which makes plain the simplicity and certainty of its action.

Its jaw holds the needle as rigid as if gripped in a vise, while the automati clocking of the handle permits a lighter grasp by the hand of the surgeon, and so faciiltates greatly that delicate finger-tip hold upon the instrument and rotary wrist-movement, so necessary to the quick and easy passage of a full-curved needle, and without which these delicate movements are well-nigh impossible, and certainly very difficult of executiou.

The manufacturers, Messrs. A. S. Aloe Co., have been kind enough to suggest, as a name for this instrument, The "Knox Improved Monk's" Needle-Holder; and, in their June issue of "Aloe's Monthly Review," they compliment it thus:

"This is, without doubt, the handiest and most practical needle-holder ever devised. When once the jaws of this instrument are closed upon a needle, the latter is so firmly held—with but slight pressure upon the handles—that, were the needle and holder one instrument, it would be impossible to make the same more solid. It works equally well on all styles of needles—barring none.

"The fact, as above stated, that it takes but a slight pressure upon the handles to hold the needle firmly, makes it possible for the operator to manipulate the instrument with a degree of delicacy and accuracy hardly possible with any instrument requiring a firmer grasp. The principal improvement of this instrument over the original "Monk's" needle-holder is, that *it never breaks a needle!*"



Some Considerations on Specific Urethretis—its Complications and Treatment in the Male.*

By F. B. Cullens, M.D., Ozark, Ala.

Mr. President and Gentlemen:

This is a specific local disease, caused by the lodgement in the urethral tract of the germ of Nieser, and its subsequent proliferation in the tissues. The disease has been known to man from time immemorial, it being very probable that the "sweet psalmist of Isreal" referred to it when, in the 38th Psalm, he says: "For my loins are filled with a loathsome disease, and there is no soundness in my flesh." But it remained for the modern pathologist to find out the efficient cause of this dread condition, there by strengthening the rationality of therapeutic effort in its relief and cure.

It is the disposition of the young and floolish man to lightly underestimate the gravity of this malady, when, as a matter of fact, there is no disease to which human nature is heir which may be so far-reaching in its bad influence. Not even syphillis itself is so mediately fatal in possibilities for evil than this thing. It is safe to say that more homes are destroyed, and more lives wrecked upon the shores of this life's sea from this disease, than any one other of the so-called small ills of humanity, and as long as men pay such free tribute at the shrine of Venus, rather than the foot-stool of Minerva, it must be so. And, Mr. President, we as physicians owe it to humanity that we should use our utmost endeavor in trying to bring them out of this stupendous error of lightly regarding this disease. I believe it ought to be written on our statute books in letters of fadeless endurance, as an organic law of the land, that no man should be permitted to marry or have sexual converse without a health-bill showing the most absolute exemption from clapp, and if our legislators would pay more attention to such practical things as this, instead of wasting much of the valuable time, which we as citizens are paying them for, in fussing and quibbling over useless and abstract questions, we would be a happier and a wiser people. There are fifty thousand blind persons in the United States to-day according to statistics. Of this vast unfortunate army at least 50 per cent. are said to have lost their sight by gonorrheal ophthalmia. This is to say nothing of the thousands and tens of thousands of unfortunate women, victims of some one or many of the cureless troubles of the genito-urinary apparatus—chronic ovarian cysts, salpingitis, pyosalpynx, cystitis urethretis, etc., etc., consigning them to spend their days in misery or sacrificing their sex to this horrid, monstrous dragon of disease.

It is a living, burning shame that such things be, and there is so little effort on the part of the authorities to stay the frightful progress of it.

The Greeks and the Romans were a sensual people, Mr. President. They spent their days in rioting, licentiousness and sexual converse; and yet we are justified in believing that they were freer from this trouble than the people of this so-called modern-day civilization. The reason is not far to fetch. They had their public baths, and the laws enforced attendance upon them. To-day every man is supposed to tub himself, and the result is there is much too little of it done. The sanitary laws of the Jews under the Mosaic regime were shining examples of good sense and adaptation to practical life along this line.

Every worshipper who entered the Tabernacle or the Temple were supposed to be physically clean as well as spiritually so.

It remained for modern civilization, with all its boasts of advancement and perfection to neglect these things most essential to the health, and, therefore, the happiness of the human race.

Instead of attending to these practical things for the betterment of our race and descendants, our law-makers spend a goodly portion of their hours in discussing abstract ideas of government, and dreamy theories of personal freedom. They set the Goddess of Liberty up and worship her as a Fetisch, forgetting that her laws may be and are easily translated into license.

Henry Ward Beecher, perhaps the great est pulpit mind of the Nineteenth Century, said: "That if cleanliness was next to Godliness, he was obliged to look upon soap as a means of grace;" and it is a pity, Mr. President, that there are not more Beechers to-day in our Parliaments than there are.

I say it with due reverence for the great genius dead, that I think Mr. Beecher would have made an excellent clapp doctor, Mr. President.

Mr. Carnegie, and men of his ilk, instead of endowing so many public libraries, and filling them with literary abstractions, would do a much greater charity, in my humble opinion, if they would build public baths with the same money, and thereby help the American Nation to clean up.

Now I have taken up enough of your time in this general talk of the malady. Let us come to the main question—the

*Read before the Dale County Medical Association, Ozark, Ala.

treatment. When a man comes to me with this trouble, I generally find that he has run the gamut of renal stimulants, and astringent and disinfectious washes, given him by the hand of some cupiditiously disposed druggist, or other well-meaning friend. The first thing I do is to instruct him to throw away all of the therapeutic rot on this line with which his pockets are loaded. I then give him a hot urethral douche with boric acid and Bichloride, 1-10,000, with a few drops of carbolic acid to the gallon of water.

I direct a mild non-irritating diet, milk principally, and if there is renal insufficiency give him about 20 grs. citrate potash, 3 times a day, until urination is free. This is both sedative and stimulating to the kidneys and bladder. I insist on a hot Sitz bath, 3 times a week; oftener if indicated; this to counteract the tendency to inflammation and cleanse the parts. If there is tendency to orchitis or epididimytis, I direct the use of a well-fitting suspensory bandage to be worn constantly. If the lumen of the urethra is at all constricted, I use as large a sound as the meatus can receive, occasionally.

I insist on no wine or women, regular habits of rest, diet, etc., and at the end of from 4 to 6 weeks I usually dismiss my patient well pleased and happy.

I neglected to state in the outset, that I usually begin my treatment by relieving the patient of any old loose twenty dollars lying around his person, for I can assure you gentlemen, that if you don't attend to this detail in the beginning, it will rarely be your privilege to do so in the ending. I thank you for your attention.

Ethical Side of the Medical Profession.*

By D. W. Sherrod, B. A., M. D,, Formerly Instructor in Latin and Physiology, Meharry Medical College, Nashville, Tenn., Macon, Miss.

GENTLEMEN:—Amid the wide range of subjects that present themselves to the thoughtful, progressive, and philosophic minds for consideration and expression, none so impresses me with its magnitude, worth, excellence and importance as the one now under consideration.

The present requirements and duties incumbent upon us are not those of more service, such as were rendered years ago, but the principles of justice and scriptural injunctions, demand of us far nobler, higher, grander, and more generous actions. Such actions as will actuate us in all of our social intercourse one with the other; and will promote through us peace and harmony in the community or communities where we reside.

That trust, to share in guarding the health and lives of our fellow-men and beings, so great, so sacred, should be carefully guarded, nurtured, defended, and wisely and intelligently protected by us. Then as the obligations devolving upon us are so great, the demands so requiring and exacting, it behooves us as a body of honest gentlemen and physicians to unite ourselves in one bond of union, and let the union be so created within us, and by us so cemented, nurtured, cherished and matured, that as a class of people, and law abiding citizens, people loving justice, we may unselfishly and unreservedly help to bear the burdens of one-another and feel another's care.

"Teach me to feel another's woe,
To hide the fault I see;
That mercy I to others show,
That mercy show to me."

How sacred should be that tie of relationship, which binds each of us in this profession, no one can know or feel until experience has taught the lesson and left its impress indellibly engraved upon the heart and memory by a lifetime of toil, of care,of privation, of anxiety, of perplexity, and many other ills, such as the intelligent, earnest and honest-hearted physicians have suffered and are suffering today.

Unhonored and unsung did we, less than a quarter of a century ago, begin the struggle for recognition and maintenance in the medical profession. Years of poverty,years of severest toil, years of careful study have we spent. We have pushed onward midst heat and cold, midst storm and adversity, with but an occasional gleam of sunshine to cheer us along life's rugged pathway; at times uncompensated,unappreciative;when life itself proved a sacrifice in the discharge of earnest duties. Yet few be the sympathetic tears that glisten and fall at the demise of such martyrs. No flowers decorate our graves from the hands of those for whom we peril and sometimes lose our lives.

To whom then must we look, aye, from whom expect condolence and sympathy, if not from those who travel the same toilsome fields of labor.

Gentlemen, in the preparation of this subject, I have saught to direct your minds into lines of sober reflections, which may serve to elevate and dignify this aged and honored profession.

*Read before the Medico-Chirurgical Association of the State of Mississippi, May 17, 1901.

If the medical profession means any thing at all to us, it means unity of action and purpose. We must guard with oars the good name of our fellow-man and brother physician at all hazzard. It may be convenient, but it is hardly magnanimous for one physician to decry the works of other physicians even in the vindication of his own rights.

It is only by a most rigid introspection that we are enabled to appreciate our relations and duties to our fellow.man. Conscience must be our judge and guide in every act of duty. Physicians must be broad-minded, honest, sincere, and fearless, allowing their minds and souls to grow into greatness even after the physical being has begun its decay.

No man ever reaches the "Ne plus ultra" of his intelligence in this life; but the soul continues to grow and unfold itself as God shall live to cherish its being.

Man's stay upon this earth is short and fleeting. He occupies a place here to-day and to-morrow that same place is filled by another. He mistreats a fellow man to-day and to-morrow can not ask his pardon.

"Like leaves on trees the race of man is found,
Now green in youth now withering on the ground;
Another race the following spring supplies;
They fall successive, and successive rise;
So generations in their course decay;
So flourish these when these are passed away."—Pope.

Professional Courtesy and Charity.

Gentlemen, we must be charitable in our criticisms of the actions and the results in the surgery of one another. This principal should be endorsed and applied to the whole domain of medicine. In many communities, the competition for practice is so great that there is much rivalry and bitter feeling between the different physicians. Even in our largest towns, we find factions operating for mutual welfare of a few at the expense of others. This is a deporlable state of affairs in a calling so lofty as this of ours. It leads men to destroy their own respectability by making statements to the laity for the purpose of winning them to their own practice.

This injures their personal respect and blunts their consciencious scruples; makes enemies instead of friends; brings regret instead of joy and happiness. Silence judiciously employed has brought honor and success to many physicians. There are certain times when it is damageing and even dangerous for one to express himself even about facts. This profession calls for honorable actions on the part of both physician and laity. Our remarks, then, should be limited to that which is absolutely necessary and right for our patients good. If we wish to be exhaulted and dignified, we must, by our words and actions exhalt and dignify those with whom the public associate us.

Great judgment and patience are necessary in the skillful handling of this profession of which we claim a part. We must be careful to trace every disease or injury, that we attend to treat, to its original etiological source and then employ rational measures in its prevention and cure. We can not afford to be careless in our diagnoses. Make a correct diagnosis of each individual case. In fact, the indifference of the profession at large in diagnosis has caused serious blunders, and in many instances lost of reputation, life, and friends.

"Time dulls all sensations, be they grief or pain,"—says some thinker. This may be true and I believe it is to a certain extent; but I venture to say that there are sensations produced in the heart by careless blunders, that change the whole course of one's life,—destroying the plans of his highest aspirations.

It is human nature to err and yet we are punished, sooner or later, for all our mistakes. Every human being owes a certain amount of respect to everything in creation be it great or small.

This is a period of transition, and it seems to take a longer time and more effect to reach the golden medium of common sense. This is especially illustrated in the medical profession. Some years ago any form of conduct would suit a doctor. The ruffer and more inhumane he was the better was he considered adapted to his profession. I am glad to say that day has past; and physicians of to-day are expected to front the ranks in every reform.

A careful survey of the worlds advance in scientific prosperity during the hundred years just past, only makes it more evident that we must utilize all the new increments of each successive generation, and make a showing for the same in our manners and works With greater advantages, we assume graver responsibilities. We are expected to settle our differences by prayer and arbitration.

There was a time, gentlemen, when ignorance and superstition ruled this great country, vice and wrong were embodiments of the laws. Then we did not enjoy the pleasure of understanding the higher sciences, such as Psychology, Logic, and Mental and Moral Phylosophy, which enable us to understand better ourselves, our

fellow man, and our relation to all of creation; and reason according to set laws.

Let our lives be such that they will inspire those among whom we labor with lofty ambitions, and a desire to elevate themselves to higher walks in social and religious life,

"Were I so tall to reach the pole,
Or mete the Ocean with my span,
I must be measured by my soul,
The mind's the standard of the man."

Shall Physicians Prescribe Proprietary Remedies?

The modern tendency of the practice of medicine is to specialism. A minute and intimate study of detail is not possible with the general worker in any department. The simple limitation of time alone prevents it.

Life—as the saying goes—is too short. This same tendency, which has done more than any other one factor to advance the art or medicine to the true standing of a science, is also apparent in every important interest about us, "Attention to detail," said Wellington, "gained the battle of Waterloo." So, specialism, by concentration of thought and purpose, has given power to the world through the perfection of varied commercial products. By unremitting study and research, by constant application, the persistant delver in any one line discovers refinements of manipulation not observed by the casual worker, no matter what may be the general skill of the latter. As this fact is recognized when once attention is directed to it, it seems remarkable that certain physicians should take exception to a proprietary preparation—simply because it is such—without regard to merits Often, in fact, carelessly classing such preparations with patented, secret nostrums offered as universal cure-alls. It would seem that there is engendered in the minds of some an antagonistic spirit against any preparation commercially presented, as if the underlying impetus was undignified and of some ulterior motive unworthy of scientific recognition. So biased are some practitioners that they construe it as unethical to prescribe anything that has not been prepared from their own prescription, or that has not been made by their nesghbor-pharmacist. Yet this same class will adopt the ideas and the representations of others, and will presuppose some local talent more competent to concoct and extempore combination that is "just as good," as that which has been prefected only after great expenditure of time and money, and which is maintained supreme in spite of open competition. They are also equally ready to condemn the true because theis false attempts at substitution prove inert and impotent.

No intelligent physician or pharmacist will deny that there are innumerable preparations in daily use, and popularly recommended and prescribed from every drug store, that are better prepared under special facilities of manufacture than are practicable in the ordinary labaratory. Bicarbonate of Soda, Rochelle Salt, Ether, Fluid Extract of Ergot. Quinine and many other scbstances are best prepared by those who have especially fitted machinery for such processes of manufacture. But the result is not uniform with all chemical processes, nor in all special laboratories. Tincture of Iron is one of the more ordinary preparations of the Pharmacopœia yet how many educated pharmacists can prepare it so it will be uniform with a standard? Indeed the day of home-made pharmaceuticals has pased. The array of bottles of macerating drugs in the cellars of drug stores long since gave place to the more speedy and more scientific method of percolation, but the advent of the manufacturing pharmacist has superceeded this with more uniform preparations. Yet different manufacturers, under the same manipulation and using similar appliances, turn out products of varying quality and differing from their competitors who are presumably possessed of like general ability. So thoroughout a vast quanity of substances of economic use, the resultant wish would be, among experts, for only the product of a certain manufacture. It is a law of nature that the fittest shall survive.

If this view of the question be correct, why should it be presumed—as is at times asserted—that so subtle a preparation as Wine of Coca may be extemporaneously made that will equal the skillfully prepared product made with all the advantages and resources of the establishment of Mariani, of Paris, France? Here is a laboratory exclusively devoted to the production of Coca preparations. This chemist has devoted nearly half a century to the perfection of the famous tonic wine which rightly bears his name. While Vin Mariani is a proprietary preparation, it is in no sense a secret remedy, but is prepared after the French cortex to present the force-giving qualities of Coca, with the mild tonic of a wholesome wine. In this form it is generally admitted to represent not only the true properties of Coca, but to be the most available form for administration of that substance. The research which devised this unique combination, the money expended in experimentation leading to its perfection, the constant

care in selection of appropriate Coca leaves and the choice of a suitable wine—both of which are watched by experts during their development—the immense pecuniary outlay in processes of manfacture and in distribution, can only be adequately repaid through the success following the general acceptance of a worthy product. That extreme care has brought perfection followed by success, entitles its originator to reap the full benefit accruing from the commercial distinction which has made the name Mariani synonymous with Coca. That Vin Mariani is conscientiously prepared, that it is introduced to the medical profession in an etheical way, that it has stood not alone the mere test of time, but is constantly increasing its sphere of usefulness, that its advocacy has steadfastly sustained interest in the parent plant when sensational assertions have led some to doubt the efficacy of Coca, are but incidental yet potent reasons why its support as endorsed by hundreds of thousands of physicians throughout the world is not only scientifically correct, but purely as ethical as is the use of any other pharmaceutical preparation. Vin Mariani as a reliable adjuvant in the time of need to support the patient, with or without other remedial measures, should not only be considered a welcome boon but should be championed by every conscientious physician who believes that worth makes might, while all such will equally agree that substitution is an affront which should excite personal condemnation.

A Veneral Disease of Horses.

The Sixteenth Annual Report of the Bureau of Animal Industry, Washington, D. C., contains an interesting account of the "Maladie du Coit" in horses as observed in Nebraska. The infection in this case was traced in part to a stallion of the Clydesdale breed, which had been used for breeding purposes. A number of autopsies are reported in animals of both sexes which had been killed after the disease was discovered in them. In the male the affection is a local one, beginning in the penis, but involving sometimes the sheath, scrotum, and testicles. An edematous swelling extended in one case along the abdomen nearly to the forelimbs. An offensive purulent discharge occurs, and the entire end of the penis may slough away. The local sore is an ulcer, covered with a black scale. A skin eruption, consisting of large white maculae, is observed. The animal emaciates and has to be killed. In the mare the infection may invade the whole genital tract and all the reproductive organs In one case the white spots were seen on the perineum and mammary glauds the vagina was highly congested; the walls of the uterus were thickened, the inner surface, being covered with a thick jelly-like exudate; and the ovaries were swollen to several times their normal size. These organs were the seats of extensive changes. There may be some systemic infection as shown in the mesenteric glands and spleen. This report contains no history of any bacteriological investigations, the accounts of the autopsies being confined to a description of the gross pathological conditions. The disease is evidently transmitted by coitus, and beginning as a local sore gradually extends, and may even invade the general system.—*Philadelphia medical Journal.*

Fibroid Simulating Pregnancy: Sudden Death After Exploration.

Mallett was consulted by a woman, aged 32, twice married, and only once pregnant. For the last ten months her period had been scanty though regular, an abdominal tumour was discovered and pregnancy diagnosed. A soft fluctuating tumor reached to the umbilicus lying more to the right than the left. No fœtal heart sounds and no uterine movements could be detected. A pigmented line extended from the umbilicus to the pubes. The cervix was slender and hard. But the breasts were distinctly enlarged, plainly pigmented, and contained an abundance of colostrum. The vagina was not discoloured. There was great difference of opinion about the nature of the tumour. A prominent gynæcologist diagnosed it as an ovarian cyst. An exploratory incision was made revealing what seemed to be a pregnant uterus, perfectly symmetrical and elastic; the veins were dilated enormously. Of two distinguished authorities present at the operation one diagnosed pregnancy the other declined to express an opinion. The abdominal wound was closed. Next morning sensations like labour pains set in. In the afternoon an attack of symptoms as seen in pulmonary embolism occured, and the patient died a quarter of an hour after they commenced. No necropsy was allowed, beyond opening of the abdominal wound. The uterus was the seat of a large soft fibromyoma, with tracts of very firm myomatous tissue.—*British Medical Journal.*

Hydrate of chloral is a most valuable remedy in the treatment of many diseases of childhood and infancy.

THE

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SUBSCRIPTION. $2-50 PER YEAR,

THE REORGANIZATION OF THE AMERICAN MEDICAL ASSOCIATION.

At the St. Paul meeting of the American Medical Association many changes in its Constitution and By-Laws were made. The Committee appointed at Atlantic City to do this work consisted of Drs. J. N. McCormic, of Kentucky, George H. Simmons, of Illinois, and P. Maxwell Foshay, of Ohio. They certainly performed the duties intrusted to them in a wise and conservative manner. It was evident to every one who was familiar with the immense amount of work of a scientific and legislative and political character that had to be accomplished at each of its annual meetings to see that some reforms were absolutely necessary. Now the general meetings and the meetings of the various sections are relieved of all duties not purelyscientific. The creation of a house of delegates was the most important and radical change made by the Committee. This body consists of delegates elected by permanently organized State and territorial medical societies that are in affiliation with the American Medical Association, one each from the U. S. Army and Navy and one from the U. S. Marine Hospital Service. The total number of members of the house of delegates are not to exceed one hundred and fifty. Those representing the State Societies are to be appointed in direct ratio to their true membership, each having the privilege of sending one delegate for every five hundred regular resident members and one for any additional fraction of that number. In case a State Society has not as many as five hundred regular members, it is provided that it has the privilege of having one representative. This new law gives North Carolina two representatives, to be appointed or elected every two years. The house of delegates is the legislative body of the Association. It will approve or disapprove every memorial and resolution of whatever character that is issued by the Association, elect all the officers, the president, the vice-presidents, the board of trustees, the secretary and the members of the various committees. Each Section elects their own officers. No time in its history has the Association been in a more prosperous condition than it is now. It is really a great medical organization and if it continues to increase in strength and in size and in its various resources for another few years, it will be the greatest Association of the kind in the world. It has often occurred to me that the membership fee of five dollars annually is too small. To receive the Journal alone regularly every week for a year is worth this small amount. The membership fee of the British Medical Association is eight dollars which includes the Journal. This fee is small enough, and if our Association would imitate our English neighbors and relatives and make the annual dues of our Association eight dollars instead of five, it would soon be able to boast of its leadership among the Medical Societies of the world.

THE IMMIGRATION OF CONSUMTIVES.

The United States Bureau of Immigration has recently made a ruling to exclude consumptive immigrants. Whether this is a wise step or whether it is in line with advanced sanitary reforms are questions that might be discussed. Self-protection is the first law of nature. The safety of our own people and the people of our State and nation is possibly the second law of nature, and if our present open door policy is dangerous to the inhabitants of our Southwestern States or the Western part of our State, it should be closed or partly closed to consumptive immigrants just as the local authorities decide. They are the people whose rights come first. For us who live in the Atlantic States to try to dictate a policy for the Board of Health of Colorado is simply ridiculous. They know better than we do what protection is needed. They know better than we do how contagious, how dangerous and how prevalent it is in their respective localities and undoubtedly it is a question for each State or city to decide for themselves what quarantine measures are practicable or advisable. The boards of health in every State and every city now have the power to exclude the immigration of tubercular patients just as they have yellow fever and small pox. It has, however, never been considered sufficiently contagious, especially in the

Southwestern States to even think of this radical measure. The statement has been made repeatedly that cases of consumption never develop on the Southern Pacific slope. This is a mistake; there is no State or hardly a single county in any State that tubercolosis has not developed and at these health resorts where so many tubercular visitors congregate must to some extent become infected, and those who attend them and associate with them must assume some risk. This class of patients who travel thousands of miles to find a better climate for themselves are usually cultured people; people with some means, and who can take better care of themselves and can provide everything that will aid the constitution and the physician and the climate to restore their health. It is not so with the lower classes. They are more careless, more filthy and more dangerous. But every one who suffers with consumption is insensible of their own danger and the danger they are to their associates. Nearly all of them resent a suggestion that possibly it would not be the best for them to kiss their relatives or sleep in the same room with them. On this account it is always difficult for a physician to do his full duty to the well members in a consumptive family.

INFANT FEEDING.

The tendency of modern medicine is certainly directed to prophylaxis. This is more clearly seen when infectious diseases appear in a family, and the attending physician insists upon isolation. The future of every individual depends on the foundation commenced in infancy. It is certainly true and will be brought out by clinicians that a child fed on *improper milk*—be it breast milk or cow's milk—thereby invites gastric and enteric disorders, which not only undermines the growing muscels, bones and nerves and brain but also retards the actual progress of development of the vital parts.

Let us first consider what is necessary for an infant. An infant requires proper food, and nothing can equal "breast milk from its own mother." The breast milk must then be given at stated intervals conforming with the age and requisites of this particular child.

Every child's stomach and appetite are different, just as true as every adult's quantity is an individual requistie. So that we cannot say, "Thou must only receive three ounces every three hours and not a drop more."

One infant will appear satisfied and go to sleep after emptying one breast of milk and have several well digested stools and play and laugh and be apparently happy. Then at the end of a week, this same infant will show a gain of five, six or even more ounces.

Another infant weighing no more and of the same age, will not be satisfied with less than the complete emptying of both breasts and cry when the nipple is taken out of its mouth.

Such an appetite must be carefully watched and the reason for the same noted.

While, on the one hand there may be a deficiency of the quantity of milk present, it might more easily be "a sufficient quantity and a very poor quantity." Then it is a wise rule to note the weight of an infant and the moment no gain is noted, to pump off one feeding and and submit the sample to a chemist for an estimation of the percentage of the ingredients. A little more care to the details of the ordinary simple methods of breast feeding will frequently be rewarded by astounding results.

One word regarding the tendency of modern experience, in the preparation of the milk or its proper dilution may not be out of place. A recent book "Louis Fisher, Infant Feeding," devotes considerable space and emphasizes the necessity of feeding with cow's milk in its "natural state." That *is feeding with raw milk.* This seems off-hand like a broad statement but when we consider that breast milk is "raw milk," and that we are simply copying from nature by feeding, then we can readily see the vast importance of this method of feeding. Clinical evidence is certainly in favor of feeding milk in its raw state owing to its anti-scorbutic qualities, and besides it does not cause that terrible bugbearer of the beginner and possibly also the older practitioner namely "constipation." Does it not then seem better to aim in securing clean milk and applying the principles of sterilization, or if you prefer the term pasteurization to the stable, to the milker's hands, and to all utensils coming in contact with the milk from the beginning to the end of the milking. In this manner we do away with the possible contamination of the milk with stable and other filth and avoid the infection with micro-organism. Then milk should not be used that is more than ten or twelve hours old. In summer, common sense dictates that milk should be put "in a very cool place immediately after milking."

BOOK REVIEWS.

An Illustrated Dictionary of Medicine, Biology and Allied Sciences, including the Pronunciation, Accentuation, Derivation and Definition of the terms used in Medicine, Anatomy, Surgery, Obstetrics, Gynecology, Therapeutics, Materia Medica, Pathology, Dermatology, Pediatrics, Ophthalmology, Otology, Laryngology, Physiology, Neurology, Histology, Toxicology, Dietetics, Legal Medicine, Psychology, Climatology, etc., etc.; and the various sciences closely related to medicine: Bacteriology, Parasitology, Microscopy, Botany. Zoology, Dentistry, Pharmacy, Chemistry, Hygiene, Electricity, Veterinary Medicine, etc. By George M. Gould, A. M., M. D., Editor "American Magazine," President, 1893-1894, American Academy of Medicine; author of "The Student's Medical Dictionary," "21.000 Medical Words Pronounced and Defined," "The Meaning of the Method of Life."

Based upon recent Scientific Literature. Fourth Edition. Prices and bindings: Full medical sheep, raised bands, net, $10.00. Half green Morocco, marbled edges, net, $10.00; with thumb index, net, $11.00. Half Russia, marbled edges, thumb index, net, $12.00. These prices are absolutely net. No discount can be allowed. Philadelphia: Blackiston's Sons & Co., 1012 Walnut Street.

It is impossible to point out the many excellencies of this work. Gould's Dictionary has no superior in completeness and excellence. It has been used for more than half a century for frequent reference to medical dictionaries. This, the fifth edition, contains thousands of new words and terms that have been introduced in medicine and the collateral sciences during recent years, in so much that it is a veritable supplement to other dictionaries and absolutely necessary to all who would have a thoroughly up-to-date and complete vocabulary. It not only contains a fine vocabulary, but also many skilfully constructed tables of great value to students of anatomy, physiology, chemistry and bacteriology, with illustrations.

The work is handsome in appearance; the paper, type, engravings and press work are all most excellent. The book is substantially bound in a strong, binding.

Coakley on the Nose and Throat. The Diagnosis and Treatment of Diseases of the Nose, Throat, Naso-Pharynx and Trachea. For the use of Students and Practitioners. By Cornelius G. Coakley, M. D., Professor of Laryngology in the University and Bellevue Hospital Medical College, New York. New (2d) edition. In one handsome 12mo. volume of 556 pages, with 103 engravings and 4 colored plates. Cloth, $2.75, net. Lea Brothers & Co., Philadelphia and New York, 1901.

It was our pleasure not many months ago to review the first volume of this excellent work. That this issue was so soon exhausted speaks well for the work. In this, the second edition, each article has been carefully revised and such corrections and additions as deemed advisable. A new chapter on the affections of the Upper Respiratory Tract in the Infectious Diseases has been added.

This new edition will be welcomed as a clear, concise and trustworthy presentation of its dual subject in its modern aspect. The volume is not a large one, but in it the author with rare skill has covered with ample detail every phase of his subject, and has done so without wasting a single paragraph on non-essential matters or on theoretical discussion.

To the general practitioner this book is all sufficient, while the specialist will find it in the highest degree helpful as a quick consultant. The new edition has been carefully revised throughout, and furnishes the most recent knowledge in its field, and while it has been found necessary to increase its size and the number of its engravings and colored plates, the price has not been advanced.

This book, in conjunction with Nettleship on the Eye and Bacon on the Ear, both of which have recently appeared in new and thoroughly revised editions, furnishes a library upon these closely related subjects, eminently practical, compendious, trustworthy and modern.

Neatly printed and well bound, the book is a handsome and substantial volume.

A System of Physiologic Therapeutics. A Practical Exposition of the Methods, Other than Drug-Giving, Useful in the Treatment of the sick. Edited by Solomon Solis Cohen, A. M., M. D., Professor of Medicine and Therapeutics in the Philadelphia Polyclinic; Lecturer on Clinical Medicine at Jefferson Medical College, etc., Vol. I. Vol. II, Electrotherapy. By George W. Jacoby, M. D., Consulting Neurologist to the German Hospital, New York City; to the Infirmary for Women and Children, etc. In two books. Book II, Diagnosis; Therepeutics. Illustrated. Published by P. Blakiston's Sons & Co., 1012 Walnut Street, Philadelphia, Pa. Price, eleven volumes, $22.00 net.

This system is the first of its kind to be published in America, or in the English

language, and in many important respects differs from similar works in other tongues. Among these differences are inclusion of themes, exclusion of irrelevant material, and general plan. The first volume is the first book in Electrotheraphy. It is written by George W. Jacoby, and is a most valuable contribution. It is devoted to electro-physics and the apparatus required for the therapeutic and diagnostic use of electricity. This volume, after being read and studied, places the reader in a position of knowing something about electricity, electric apparatus and the measurements and uses of the different currents. All the different forms of electricity have been discussed; latest advances are given in all the departments of electrotherapeutics as well as electrophysics.

Proper space and attention has been given to the Roentgen ray. Vol. II treats of Diagnosis; Therapeutics. In addition to Dr. Jacoby's thorough treatment of the general subject of electotheraphy, this volume contains several articles on the uses of electricity in surgery and the specialties, by writers of experience and authority. The methods of treating spasm of muscles, rheumatism, different forms of neuralgia, neurosthenia are quite interesting and instructive. The description of the use of the electric cautery is good. The use of electricity in diseases of the eye and of the nose and throat are clearly stated. Both volumes before us are well printed, and have a large number of excellent illustrations, and will be found by every student and practitioner to be the very thing he needs. We heartily advise our readers to take the entire eleven volumes, and they will then be provided with a library on physiologic therapeutics which they will find superior to their entire Materia Medica in many instances. The publishers have issued the work in a most attractive style, and we bespeak for them marked success.

Ewing on the Blood and Its Diseases. Clinical Pathology of the Blood. A Treatise on the General Principles and Special Applications of Hematology. By James Ewing, M. D., Professor of Pathology in Cornell University Medical College, New York City. In one handsome octavo volume of 432 pages, with 28 engravings and 14 full-page plates in colors. Cloth, $3.50, net. Just ready. Lea Brothers & Co., Philadelphia and New York, 1901.

This work of 432 pages gives the rapid advances in the knowledge of pathology of the blood and the multitudinous applications of this knowledge in clinical diagnosis which the last decade has witnessed. Until recently such information had to be derived from periodical literature and special articles. and as a consequence, Dr. Ewing has done a great service in gathering all this information to date in a single, well-digested volume. It may be further stated that the blood, the most perversive and perhaps the most important of all organs, has been strangely neglected till recent years.

The author of this work has with great skill and admirable clearness pointed out the relations between the changes in the blood and visceral lesions, whether as cause or consequence. As a trustworthy clinical guide the volume will be fully appreciated, especially by those physicians who desire to reap the advantages of laboratory study.

The work is comprehensive and authoritative. It presents the most recent knowledge in its department, and its clear text is rendered still more explicit by the use of a most beautiful and instructive series of original plates in many colors.

The book is printed well and nicely bound, and the up-to-date physician, by its careful perusal, will find much benefit. It is a valuable work on an important subject.

Saunders' Medical Hand-Atlases. Atlas and Epitome of Labor and Operative Obstetrics. By Dr. O. Shaeffer, of Heidelberg. From the Fifth Revised German Edition. Edited by J. Clifton Edgar, M. D., Professor of Obstetrics and Clinical Midwifery, Cornell University Medical School. With 14 lithographic plates, in colors, and 139 other illustrations. Philadelphia and London: W. B. Saunders & Co., 1901. Cloth, $2.00 net.

There is no branch of medicine or surgery that is so difficult to demonstrate as that of midwifery; hence any positive aid, such as this Atlas furnishes, is to be hailed with satisfaction. The author has added to the multitude of obstetric subjects already shown by illustration, many accurate representations of manipulations and conditions never before clearly shown.

The Anatomical Atlas of Obstetrics of Dr. Oskar Shaeffer will be found of great value for the student and practioner as a book of reference, to be used in conjunction with larger treatises on obstetrics.

Part I presents in a clear, concise and practical way "The Physiology and Dietetics of Pregnancy, Labor and the Pueperism."

In Part II will be found pathology and treatment of pregnancy, labor and the puerperism. The work covers the diagnosis and treatment of all obstetric conditions. Many of the illustrations are from original drawings and water colors, and

illustrate actual cases in practice. As a a guide in the perusal of text books, and as a volume of avrdy reference, this book will prove invaluable.

Saunders' Medical Hand-Atlases. Atlas and Epitome of Obstetric Diagnosis and Treatment. By Dr. O. Shaeffe, of Heidelberg. From the Second Revised German Edition. Edited by J. Clifton Edgar, M. D., Professor of Obstetrics and Clinical Midwifery, Cornell University Medical School. With 122 colored figures on lithographic plates. 38 other illustrations and 317 pages of text. Philadelphia and London: W. B. Saunders & Co., 1901. Cloth $3.00 net.

This book treats particularly of obstetric operations, and besides the wealth of beautiful lithographic illustrations, contains an extensive text of great value. The symptomatology and diagnosis are discussed with all necessary fullness, and the indications for treatment are definite and complete. In this new edition both text and illustrations have been subjected to a thorough revision. Most of the colored plates are new, and illustrate the modern improvements in technique as well as a vast amount of new clinical material.

Saunders' Question Compends. Essentials of the Diseases of children. By William M. Powell. Third Edition. Thoroughly revised by Alfred Hand, Jr., M. D. Dispensary Physician and Pathologist to the Children's Hospital, Philadelphia. Pp. 259. Philadelphia and London: W. B. Saunders & Company, 1901. Price $1.00, net.

In this, the third edition of Dr. Powell's Essentials of the Diseases of Children, numerous additions and changes have been made in the book so that it continues to represent the present state of pediatrics.

The work furnishes material with which students may lay the foundation for the successful practice of medicine among children. The section on infectious diseases and many of the paragraphs on pathology have been rewritten. The alterations have been well done and the answers to questions are clear. The book is a useful one, and the student who properly studies it will be benefitted.

Nursing Ethics- For Hospital and Private Use. By Isabel Hampton Robb. Cleveland: J. B. Savage, 90-92 Wood St., 1901.

This book will be of inestimable value to the nurse in training. It is not only of value to the nurse in training, but to the graduated nurse, and it affords pleasant reading for the physician. It tells the nurse just how to do; how she must carry herself; fix her hair; her manner of speech; the quality and amount of food she must eat, and a successful nurse must be gentle and sympathetic. The book is interesting and we highly commend it.

Saunders' Medical Hand-Atlases. Atlas and Epitome of the Nervous System and Its Diseases. By Professor Dr. Chr. Jakob, of Erlangen. From the Second Revised German Edition. Edited by Edward D. Fisher, M.D., Professor of Diseases of the Nervous System, University and Bellevue Medical College, New York. With 83 plates and copious text. Philadelphia and London: W. B. Saunders & Co., 1991. Cloth, $3.50 net.

In this Atlas the author has portrayed an instructive section of medicine which is usually extremely difficult of mastery by students and practioners. This work will be of great value to the physician. The matter is divided into Anatomy, Pathology and Description of Diseases of the Nervous System. The plates illustrate these divisions most completely. There is probably no work in existence in which so much is compressed within so small a space. The book is comprehensive and practical.

The Acute Contagious Diseases of Childhood. By Marcus P. Hatfield, A. M., M. D., Professor Emeritus of Diseases of Children, Northwestern University Medical School; Professor of Diseases of Children, Chicago Clinical School; Attending Physician Wesley Hospital. Pages, 142. Price, $1.00 net. G. P. Engelhard & Co., 358-362 Dearborn Street, Chicago. 1901.

A sister to the other book on new remedies, this one is just as valuable. It gives in the most condensed form possible a complete description of all the contagious diseases of childhood—scarlatina, measles, German measles, parotiditis, epidermicas pertussis, varicella, variola, la grippe. The treatment of these different affections in its condensed form is excellent. We would like for every physician to own the book. So far as it goes it is complete.

A Text-Book of the Practice of Medicine. By Dr. Herman Eichhorst, Professor of Special Pathology and Therapeutics and Director of the Medical Clinic in the University of Zurich. Translated and edited by Augustus A. Eshner, M. D., Professor of Clinical Medicine in the Philadelphia Polyclinic. Two octavo volumes of over 600 pages each; over 150 illustrations. Philadelphia and London: W. B. Saunders & Co., 1901. Price per set: $6.00 net.

This book is a new one. Among all

German clinicians no name is more renowned than that of the author of this work. He stands to-day among the most eminent authorities of the world, and his text book on the Practice of Medicine is probably the most valuable work of its size on the subject. The writer is very frank; he does not assume greater knowledge of obscure diseases or conditions than he possesses.

The contents of volume one are: Part I, Diseases of the Circulatory Organs; Part II, Diseases of the Respiratory Organs; Part III, Diseases of the Digestive Organs; Part IV, Diseases of the Genito-Urinary Organs; Part V, Diseases of the Nervous System.

The contents of volume two are: Part V, Diseases of the Nervous System continued; Part VI, Diseases of Muscles; Part VII, Diseases of the Skin; Part VIII, Diseases of the Spleen and Blood; Part IX, Disorders of Metobolism; Part X, Infectious Diseases.

It is practically a condensed edition of the author's great work on Special Pathology and Therapeutics, and it forms not only an ideal text book for students, but a practical guide of unusual value to the practicing physician. As the essential aim of the physician will always be the cure of disease, the fullest and most careful consideration has been given to treatment.

Throughout the work where special attention is directed to a subject, heavy-faced type is used. While the work is a comprehensive one, yet it is concise, accurate and complete. The author and publishers are to be congratulated upon the success of their work. It redresents the medical literature of to-day. It will please the reading physician.

A Syllabus of New Remedies and Therapeutic Measures. With Chemistry, Physical Appearance and Therapeutic Application. By J. W. Wainwright, M. D., Member of the American Medical Association; New York State Medical Association, United States Pharmacopeial Convention, 1900; American Chemical Society, etc. Pages, 229. Price $1.00 net. G. P. Engelhard & Co., 358-362 Dearborn St., Chicago, 1901.

Synthetic chemistry has added many new remedies to the physician's armamentariam, and the knowledge of these becomes day by day more extended as these applications are better understood. Such remedies as are found in this little book have been scattered to the four winds heretofore; their uses and description had to be derived from journals and floating literature. This book gives in large the name and formula with the therapeutic indicationsof every new remedy. The little book is really one of the most valuable of its kind we have received. It is clearly printed and nicely bound and the physician cannot know its value until it comes into his possession.

Transactions of the American Pediatric Society. Twelfth Session. Held at Washington, D. C. Edited by Walter Lester Carr, M. D. Vol. II.

In this book of 250 pages will be found the proceedings of the Twelfth Session of this Association. Each section is well represented by good, original, scholarly papers. The typography and binding is excellent.

Transactions of the Twenty-second Annual Meeting of the American Laryngological Association. Held in Washington, D. C. New York: Carey Printing Co., 1901.

These transactions contain quite a number of valuable and instructive papers by prominent writers. The discussions are good. The President's address was delivered by Samuel Johnston. Henry L. Swain, of New Haven, is Secretary.

The Transactions are tastefully gotten out, well printed and bound, and contain several good illustrations.

LITERARY NOTES.

The articles on "Russia of To-Day," by Henery Norman, which have been a feature of Scribner's Magazine (but have been interrupted for several numbers) are resumed in the June number with a paper on "Finland," which is just now the centre of interest on accunt of the efforts of the Russian Government to suppress the Finnish language in official business. Mr. Norman writes very sympathetically of this hardy people who have so long maintained their individuality while a part of the Russian Empire. He gives remarkable instances of their energy and integrity, and shows the pathos of their attempt to keep their identity against heavy odds.

By way of contrast of these people of the North is John La Farge's account of his visit to the Samoans—the people among whom Stevenson found his adopted home. Mr. La Farge describes and pictures them as an artist with a rare poetic faculty of narrative. Many of the illustrations are from sketches made at the time.

Walter A. Wyckoff in this number deals with a happy episode in his career as a working-man. He tells of the life of a sec-

tion hand on the Union Pacific Railroad, and gives a vivid account of the many qualities of the men he labored with. All of Wycoff's experiences lead him to be an optimist in regard to the American laborer.

A new writer of sea stories, James B. Connolly, who first appeared in Scribner's several months ago, has in this number another of his stiring tales entitled "On the Echo o' the Morn." This is the story of how a Gloucester fisherman eluded a British war ship during the days when fishermen were held up for fishing inside the three-mile limit. It is a marvellously stirring tale of the sea, and confirms Mr. Connolly's reputation as a writer in a very difficult field.

The delightful humor of Mrs. Wiggin's fiction is shown at its best in the short serial called "The Diary of a Goose Girl." The setting is in a quaint old English town and the story is fortunately illustrated by Shepperson, the English artist.

While Oxford and Cambridge are often written about in American Magazines, there has never been a popular article on the Universities of Scotland until the one in this present issue by Prof. John Grier Hibben, who recently visited St. Andrews, Aberdeen, Edingburg, and Glosgow. The history and traditions of these Universities are romantic, and the article is appropriate at the present time when Glasgow is celebrating its 450th anniversary. Mr. Hibben gives also a pleasing picture of the present undergraduate life at these Universities, and the illustrations show not only the picturesque buildings but the students at play.

Ernest Seton-Thompson begins in this number one of his tales of animal life, the hero in this one being "Krag, the Kootenary Ram." It is illustratrd with the author's own paintings.

The great "Rafflas" in this number is shown in his most during exploit—undertaken to baffle the London police.

Senator Hoar, from his long experience in public life, writes a paper on "Oratory," giving his ideas on what constitutes a great orator.

There is an amusing story, "Clara's Vocation," by a new writer; poem's by J. R. Taylor, and others; and a discussion of some of the artistic features of the Buffalo Exposition by two well-known architects, Walter Cook and John M. Carrere.

The July Forum is opened by important articles on political problems of the day. The first, by Mr. W. C. Jameson Reid, is "A Plea for the Integrity of China," as against the attempts of European powers to secure its partition for their own advantage. Congressman H. S. Boutell shows the bearing of "The Sale of Texas to Spain" upon the question whether all territory acquired by the government becomes *ipso facto* "an integral part" of the United States. Other political articles are contributed by Congressman Oscar W. Underwood, who protests against "The Corrupting Power of Public Patronage, and by Mr. Walter Macarthur, who gives an account of "The Movement for a Shorter Working-Day." Five articles deal, more or less, with educational subjects. President Thwing, of the Western Reserve University, brings together the opinions he has gathered from graduate correspondents respecting "The Shortened College Course." Mr. Jacob Schoenhof quotes the example of European and English enterprise to slimulate this country to pay greater attention to "Higher Technical Training." Mr. John Corbin puts the question, "Is the Elective System Elective? and shows that in many cases the object intended by this system is not fulfilled. Mr. R. Clark points out "Certain Failures in School Hygiene, which he has noticed in various schools in several States. Prof. A. D. F. Hamlin, of Columbia University, offers "A Plea for Architectural Studies" on account of the valuable contribution they make to general culture. Other articles are: "Medical Practice and the Law," by Mr. Champe S. Andrews; "The Ethics of Loot," by Dr. Gilbert Reid; "The Liberal Party, a Menace to English Democracy," by Mrs. Mahood; and "Religious Journalism in England and America," by Mr. Herbert W. Horwill.

"John Hancock was the first to sign the Declaration," says Laura S. La Mance in July "New Lippincott, "and his bold, heavy, inky-black signature is a character-study in itself. There is dash and fire, frankness and firmness in it, and the tremendous flourish at its close shows ready wit, firm nerve, and sure execution. Hancock was Governor of Massachusetts many terms. He left most of his forune to colleges and for benevolent purposes.

"Roger Sherman died in 1793, the same year as Hancock. Shoemaker, surveyor, lawyer, storekeeper, Mayor, Congressman, Judge and Supreme Judge, Senator, member of the Committee of Declaration and of the Boards of War and Ordsnance, he disproved the old proverb about Jack-of-all-trades by being a success at all. He was sagacious, practical, and of quickest wit. Senator Randolph, proud both of his aristocratic birth and of having the blood of the Indian Princess, Pocahontas, in his

veins, despised Sherman because of his lowly orgin. Once when the latter was speaking he interrupted him:

"'Can the Senator from Connecticut tell me,' piped he in his shrill, sarcastic voice, 'what he did with his leather shoemaker's apron when he came to the Senate?'"

"Quick as a flash came the answer, "I cut it up to make moccasins for the Indian Senator from Virginia!'"

In the editorial department of the Review of Reviews for July, Dr. Shaw discusses the propects of the wheat and corn crops, the conditions of our export trade, and the recent growth of American capital; on the political side, the decisions of the Supreme Court in the insular cases are reviewed and summarized, together with Cuba's acceptance of the Platt amendement and the outlook for Porto Rico and the Phillipines; Mr. Carnegie's gift to the Scotch universities, the choice of Dr. Remsen as the new president of Johns Hopkins University, and the launching of the Washington Memorial Institution are among the educational topics treated in this issue.

American readers will be glad to know that the important *Quarterly Review* article on "The Character of the Queen" will be reprinted entire in The Living Age for May 25 and June 1. No article regarding the Queen has made such a stir in England as this: and no other is written from so close and intimate a knowledge. The London correspondent of the New York Tribune cables that there is almost as much speculation as to its author as there has been regarding "An Englishwoman's Love Letters." The two numbers of The Living Age containing the article will be mailed, postpaid, for twenty-five cents.

The established feature of the "New" Lippincott Magazine is its complete novel in each number. Nothing is continued, the number is always as complete as a book. For June the novel is "Four-Leaved Clover," by Maxwell Gray, who is known to everybody as the author of "The Silence of Dean Maitland."

ABSTRACTS of One Hundred of the Leading Articles of the Month.

Action of Morphine on the Stomach.

Dr. Hirsch of Stuttgart, in Quarterly Journal of Inebriety, makes the following contribution to this subject, giving this summary of his experiments:

1. Morphine in a dose of 0.01 (1-6 gr.) injected into a dog subcutaneous causes a sudden and complete cessation of the expulsion of the contents of the stomach, lasting for a few hours.

2. This inhibitory action on the expulsion of the stomach contents is caused by a tonic contraction of the pylorus which lasts for hours.

3. Simultaneously with this tonic contraction a strong peristalsis of the pars pylorica of the filled stomach takes place; a slight one of the empty stomach, while the fundus remains at rest.

4. In consequence of the action of the morphine the secretion of the HCL is at first reduced, while later on it is increased.

5. The increased peristaltic action of the pylorus and the central peristalsis of the filled and empty stomach are due to a stimulation of the contraction centers for the pylorus and pars pylorica in the corpora quadrigemina.

6. The inhibition of the HCL secretion in the beginning of the morphine action is probably due to the excretion by the gastric glands of the subcutaneously injected morphine, while the later occurring HCL hypersecretion has a central origin.

On comparison with other experimental investigators on man, the author has come to the conclusion that:

1. There is an inhibitory action on the expulsion of the contents of the stomach.

2. At first there is a diminution in the secretion of HCL and afterwards an increase of the same.

3. This is increased more by subcutaneous injection than when given by mouth.

5. If food is given at the same time it bears a respective influence on the secretion.

A Plea for Uniformity of Technic in Widal's Reaction.

The points to be observed and emphasized, according to Randle C. Rosenberger, in American Medicine, are the following:

1. The use of uniform dilution.

2. A definite time-limit.

3. An agreement as to what constitutes a positive reaction.

4. The use of a culture of definite age, and a clear statement as to incubation or non-incubation.

5. A decision as to whether dried blood, fresh blood or serum is to be used.

6. A stated number of tests to be made in a given case.

7. To dorp the term "doubtful" and "pseudo" reaction.

8. Use the terms "positive" and "negative" only.

Of course some physicians may say that medicine is not an exact science, and no appropriate uniformity can be expected. The object of this paper is not to revolutionize the method, but merely to plead for uniformity and definite technic in using a very important scientific aid to the diagnosis of typhoid fever.

A Case of Antrum Infection and Sigmoid Sinus Thrombosis without Present Middle-Ear Disease, &c.

This case is found in American Medicine for June 1st, and is given by Dr. Bayard Holmes. From a study of this case in connection with the literature upon the subject the writer makes the following brief conclusions:

1. Mastoid antrum disease is the appendicitis of the head.

2. In every case of infection within the head where some other source of infection cannot be demonstrated, the mastoid antra should be explored.

3. The facial neuralgia is not explainable by the pathologic findings.

4. The excellent mental condition even up to the last seems hardly consistent with the obliteration of both jugulars and the suppuration in all the great sinuses of the dura, although mental or cerebral disturbances are not prominent symptoms of sinus thrombosis.

5. The convulsion is unexplained.

6. The clinical picture is otherwise quite fully explained by the pathologic findings.

7. The case was of neglected rather than of erroneous diagnosis.

A Contribution to the Modern Treatment of Piles.

The most important factor in hemorrhoidal disease of almost all kinds is disturbance in the normal formation of the fecal masses and of the regular soft evacuations, no matter whether the underlying cause is dependent upon some derangement of the intestinal functions themselves or whether the affection is seconday to or accompanies troubles in other organs. Dr. Jedlicka, in an article in the St. Louis Medical and Surgical Journal, says:

1. In the great majority of cases of hemorrhoidal disease the final and immediate cause is to be found in the accumulation and impaction of fecal matter in the lower section of the large intestine.

2. To remedy the hemorrhoidal disease we must remove this morbific factor; and for this purpose we must employ general treatment, but more especially local measures, to soften the stool and effect an easy and painless defecation.

3. For treatment on these lines, or as a basis for further radical measures, we have in the iodin-resorcin-sulfonate of bismuth, or anusol, a thoroughly suitable local specific which answers every requirement.

A Hundred Years Ago.

At the beginning of the century there were only four medical schools in this country, and four State societies, organized for the advancement of medical knowledge. In the St. Louis Medical Review Dr. N. S. Davis says:

At the beginning of the nineteenth century smallpox was so common that few persons reached adult life without having had the disease, and the mortality from it in childhood was great. What is the status of this disease to-day? I venture to say there are many physicians in this audience who have never seen a case, and that a majority of them have not treated more than four or five cases during their whole professional experience. In the early days of this nation's history yellow fever spread to Philadelphia and New York, and provoked much discussion, for it was feared that it would prove as great a pest as cholera. A careful study of the disease and a consideration of the possibility of preventing it was referred to a committee of the New York Medical Society, which reported that yellow fever may be produced in any country by pestilential effluvia. How different is this conclusion from that of recent students of the subject, who assign to it a specific cause, which is transmitted from man to man by mosquitoes, who are its host.

Bacteriology of Typhoid Fever.

Concerning the Bacteriology of Typhoid Fever, Dr. Philip Hanson Hiss, Jr., in the Medical News, gives the following conclusions:

1. During the course of typhoid fever, usually after the first week, typhoid bacilli can frequently be obtained from the blood, spleen, rose-spots, urine, and feces, and in rarer instances, it is claimed, from the secretions or exudations of the mouth, throat and lungs. After death the bacilli have been demonstrated in these and other locations and lesions, such as the lymphatic tissues of the intestine, the mesenteric

glands, bone-marrow, lungs, liver, gall-bladder, kidneys, etc.

2. The bacilli, as far as can be determined from various observations, do not thrive or even survive long in the circulating blood. They are, however, able to live and multiply at some, at least, of the points at which they are deposited by the blood and lymph, thus forming bacterial foci within the tissues.

3. Morphological examinations of tissue sections to determine the relation of the bacilli to the lesions of typhoid fever have in most instances proved unsatisfactory and have given inconstant results. Some of the lesions, without doubt, occur at points remote from the bacilli. On the other hand, it is probable that the bacilli are intimately associated with many of the lesions, since wherever the bacilli, after gaining access to the tissues and fluids of the body, find lodgment and establish foci, after gaining access to the tissues and fluids of the body, the various products of bacterial metabolism and degeneration are thus concentrated and doubtless give rise to lesions at these points. Moreover, it is not unlikely that certain lesions occur only at points of localization of the bacilli.

4. Typhoid fever, therefore, is an infectious disease, in which a wide dissemination and multiple localizations of the bacilli are frequently demonstrable both during life and after death. During the course of the disease, various tissue changes take place, some necrotic, others hyperplastic. Some of these lesions are at points remote from the inciting organisms; certain facts, however, point strongly to a close association of the bacilli with some of the more characteristic lesions, especially those of the lymphatic tissues.

5. There is a close connection, in time at least, between the appearance in, and disappearance from the intestinal contents, of the typhoid bacilli and the appearance and repair of the intestinal ulcers. The organisms are only very demonstrable in the stools before the first days of the second week and disappear with the fall of the fever. During the period at which intestinal tissue destruction is most active they can be isolated with great regularity. When continuously absent in typical cases, this may be looked upon as indicating a probable scarcity or absence of intestinal lesions.

6. The urine in a certain percenage of cases contains the bacilli, though not often before the end of the second week. The organisms may not appear until very late in the disease or during convalesence. They may persist for days, weeks, and it has been claimed for months, and are generally associated with albuminuria.

HYGIENIC CONCLUSIONS.

1. The urine of typhoid fever patients should always be disinfected. From a hygenic standing bacteriological examination of the urine of patients convalescing from typhoid fever is important and should never be omitted before patients are allowed to go at large, so that proper precautions may be taken to guard against the dissemination of typhoid bacilli by the urine. This is an often neglected source of infection that should be seriously considered in the hygiene of typhoid fever.

2. Feces, of course, should be disinfected at all stages of the disease, but the organisms being present generally only from the beginning of the second week to the fall of the fever, and the patient during this period usually being confined to bed, the feces are not such a source of infection to the community at large as the urine.

3. The bacilli may on account of the lung and throat lesions be present in the mouth of those suffering from typhoid fever, hence the expectoration should be disinfected, as well as all eating utensils, etc., used by the patients.

Bandages for Nephroptosis.

In the Nashville Journal of Medicine and Surgery this subject is discussed by George M. Edebohls, in which he says:

Bandages for movable kidney may be divided into two general classes:

1. Simple bandages, and apparatus embodying the feature of a special kidney pad.

2. Simple bandages act by supporting the entire contents of the abdomen, sustaining and more or less immoblizing the movable kidney or kidneys on top of the intestinal mass.

3. All the relief to be gotten from bandages in cases of movable kidney, is obtainable from one of two devices, either from an elastic bandage, encirculing and sustaining well the lower two-thirds of the abdomen, or from a long and low-reaching corset, fitted and adjusted with the same end in view.

4. The relief obtainable from bandages in any case of movable kidney will depend upon the presence and the degree of any associated enteroptosis the better the prospects of relief from a bandage or corset. When movable kidney exists without general enteroptosis, no form of apparatus will prove satisfactory.

5. All forms of apparatus with special kidney pads or trusses are to be absolutely

rejected because they are impotent to fix and sustain a movable kidney, and because any pressure they may exercise is injurious to either the kidney or to neighboring organs, especially the vermiform appendix, or to both.

6. In all cases which relief of symptoms cannot be obtained from either a proper simple bandage or corset, nephropexy is indicated.

The Bacteriological Examination of Clinical Themometers.

The probabilities of infection by means of a themometer is very great, and it is to be much regretted that general practitioners are to neglecful of this important matter. A very unwise and unsafe method is to use some antiseptic or germicide kept in the themometor case. It is not necessary to say that the customary habit of simply rinsing a themometer in water and wiping the instrument on a towel or handkerchief affords no protection.

Randle C. Rosenberger, writing in the American Medicine, gives the following conclusions in regard to this matter:

1. It is possible for the thermometer to be laden with the usual fiora of the oral cavity.

2. Such bacteria may retain their capability of growth for an indefinite time, at least two months, as shown by the above experiments.

3. Many pathogenic bacteria possess similar capabilities, and it is not unreasonble to assume, although the above experiments are not conclusive upon this point, that transmissission of bacterial disease by the thermometer is possible.

4. Thermometers are easily disinfected

5. Where possible each patient should be possessed of a thermometer, as much his own property, and as sacred to his own use as his toothbrush.

6. Where for reasons of economy or otherwise it is impossible to carry out the recommendations expressed in conclusion five, the thermometer should be disinfedcted before and after using.

7. The custom now prevalent in the hospitals of keeping thermometers in disinfecting solutions is to be commended.

Chronic Gonorrhoea and Post-Gonorrhoeal Urethritis.

Considered lightly by many, the treatment of gonorrhoea is the most dfficult and uncertain of all diseases. Fred C. Vallentine, in Medical Record, closes a lengthy article with the following conclusions:

1. That in these conditions, like all others, the cause of the perpetuation of the disease must be sought.

2. That no one remedy exists or can exist which will meet all the causative indications.

3. That the cause of a chronic urethral discharge is easily found, and when found can be successfully treated.

4. That the majority of chronic urethritides can be successfully treated by the general practitioner, and that the service of the specialist are required only in exceptional cases.

5. That the physician's duty is to warn all his patients of the dangers of gonorrhoea to themselves, their family, and the public.

6. That no person who has had gonorrhœa at any time should be allowed to marry until it is proven that he or she is free from the disease.

Catharsis in Abdominal Surgery.

The comparative effects of different cathartics and enemata, before and after operation, in surgical cases, when the abdomen is the part of the body affected, is a study, the practical importance of which no one will question. L. R. G. Crandon in the Boston Medical and Surgical Journal, concludes a well written article as follows.

1. In acute pelvic peritonitis both enemata and drugs by mouth should be used to produce catharsis before operation; drugs by mouth and oil enemata after operation. 2. In all acute inflammatory conditions of the abdomen where the alimentary tract is involved, the bowels should be moved by enemata alone, before and after operation, the enema of salts, turpentine and glycerine being the best.

Cough Due to Reflex Irritation in the Upper Air Passages.

Frank S. Milbury, in the Journal of the American Medical Association, says a cough is reflex in its origin:

1. When it is spasmodic, practically constant, without or with but little expectoration and temperature. 2. When the physical signs of pulmonary disease are absent. When it persistently resists all medication for permanent relief. 4. When the general health remains comparatively undisturbed; and 5, when upon removal of the cause it promptly ceases.

Complicated Fractures---Their Diagnosis and Treatment.

Some good advice is given in concluding an article in The Philadelphia Medical Journal, by Thomas H. Manley, in which he says: "Permit me to make a plea for practitioners treating more fractures at home—keep them at home."

They constitute an interesting class, and are amply remunerative. Stop this demoralization of the people, of forcing on them your service for nothing. If you feel you are incompetent, then take a post-graduate course or several of them in some institution where this important branch of surgery provides ample opportunities and facilities for instruction.

Dyspepsia.

Brunton makes the following suggestions to dyspeptics:

1. Eat slowly, masticate and insalivate thoroughly. And, if necessary, follow Sir Andrew Clarke's rule—count the bites.

2. Take the solids and liquids separately, so as not to dilute the gastric juice nor weaken the digestive ability of the stomach.

3. If necessary, let the patient take his farinaceous food and the proteids at different meals.

3. The best fluid is hot water, taken early in the morning and an hour or two before lunch and dinner.

a. Alkalies before meals stimulate secretion of gastric juice.

b. Acids before meals check acid secretions of the stomach.

c. Where the food remains in the stomach an unusual length of time lavage should be resorted to.

Diaphragmatic Hernia.

C. A. Parker, in the Medicine, gives a description of five cases of diaphragmatic hernia and in his opinion fully justify the following conclusions:

1. Diaphragmatic hernia is of fairly frequent occurrance; the diagnosis more rarely made than in almost any other known surgical condition, being limited to two per cent of the cases.

2. Absence of a sac is the rule, it being present in but ten per cent of all cases, and in only about one per cent. of traumatic.

3. Although the so-called weak places in the diagram predispose to hernia in some traumatic cases, in shot and stab wounds no such causal relation exists.

4. Stab wounds are usually on the left side because of the desire of an adversary to inflict injury on the heart side, and because it is the side naturally opposed to the stroke from an opponent's right hand.

5. The contents of the hernia are most frequently omental, but may include almost every solid and hollow viscus in the abdomen.

6. A complicating intercostal hernia is not infrequent, having occurred in two of the writer's five cases.

7. Though many of the congenital and acquired lesions of the diaphragm are so extensive as to be quite comfortable with life, yet gross defects in its structure, with dislocation of many important viscera, may occur with little or no disturbance of health.

8. The diagnosis is aided by tde presence of local scars or lesions directing attention to the diaphragm. Skiagraphy may also be of value.

9. The *immediate* danger in large wounds of the diaphragm is due to injury of adjacent viscera; the *remote* danger, from contraction of the opening and constriction of the contents, is greatest in small wounds.

10. Spontaneous cure may result from contraction of the orifice and atrophy of the contents composed of unimportant structures.

11. The treatment is surgical and is limited to a small percentage of cases, on account of (*a*) the infrequency of diagnosis, (*b*) severity of gross lesions and symptoms, and (*c*) inaccessibility of the part injured.

12. In the examination of all wounds in range of the diaphragm, the possibility of injury to that muscle should be remembered, and all wounds in its structure should be closed at once, if possible, to prevent the development of hernia.

The Diagnosis and Surgical Treatment of Prolapsed Kidney.

Concerning this subject Augustus H. Goelet, says, Medical Record, that his observations have led him to the following conclusions:

1. That prolapsed kidneys is more frequent than is generally supposed.

3. That it is often not suspected, because it does not always give rise to symptoms directly referable to the kidney.

3. That frequently it is not discovered because, by the usual methods of examination, only an expert can detect it, unless the kidney is much enlarged or the subject is thin and the abdominal wall relaxed.

4. That palliative measures are of no avail and therefore useless and unwise if the degree of prolapse is sufficient to produce symptoms.

5. That lumbar fixation is the correct method of treatment when there is no contraindication; the operation being simple, devoid of risk, and successful when properly executed and the patient is given careful preparation and proper attention during convalescence, extending over a period of several months.

Ether as an Anæsthetic.

Edward Judson Wynkoop, in The Medical Record, says about the use of ether that, first, ether from its physiological action is the safest of anæsthetics. Second, more care is necessary in preliminary examinations, and more care in regard to the position and condition of patients during the narcosis. Third, a good inhaler—the simpler the better is needad—with fresh ether, made by a reliable firm, and for this purpose the small quarter-pound cans are the best; the ether is to be added in small quantities frequently, beginning the narcosis with the inhaler a short distance from the patient's face and gradually bringing it down. Fourth, the more detailed study of this important subject is called for in our schools and hospitals. Fifth, the presence of a trained anæsthesist at all operations is necessary.

Fracture of the Skull.

Thomas H. Manly, in the American Journal of Surgery and Gynecology, says in connection with cerebral fractures, the following will prove of some avail:

1. In cranial traumatism, cerebral localization is very often indefinite.

2. In deprest fractures, the chisel and mallet should entirely displace the trephine.

3. Subcutaneous cocainization will largely set aside pulmonary anesthetics in most skull injuries.

4. With sterile sutures in a clean scalp-wound, we may, as a rule, close the wound.

5. Mustard powder is an excellent and effective antiseptic for scalp wounds.

6. Operative surgery is comparatively impotent in all grave intracranial injuries—especially of the brain.

Extermination of Tuberculosis.

J. E. Kinney, in The Journal of the American Medical Association, says he believes that tuberculosis can be exterminated by proper dietetics and hygiene. There are two obstacles, however, which are almost insurmountable, the first being the fact that as a rule people are not ready, while having a fair degree of health to make effort to preserve it. Those who have not suffered are not willing to be taught, and so will not readily co-operate in regulating the conditions which have to do with their own health or the health of their children until they become ill. Then the poverty of many in small communities, and of the masses in the large cities, does not permit such foods and shelter, air and exercise as are required to produce healthful physical conditions. But each one must answer the question for himself, and as he thinks so will he work, and as he works so will the cause be hastened or retarded, for according to our present knowledge it depends not on any climate and its influence, nor on any community and its sanitation, nor on any one person and his work, but on the united efforts of all in every community.

Endometritis: How Frequently a Causative Factor in Dysmenorrhea.

Dysmenorrhea is the chief public disturbance among young and married women who come to the gynecologist for relief. It is a subject demanding most carful investigation and study. The conclusion to be drawn from an article in the Homœpathic Journal of Obstetrics Gynecology and Pediatrics by Florence N. Ward are:

1. Simple or primary endometritis is not a bacterial disease, but a glandular inflamation of the endometrium.

2. Clinical experience shows that in the large majority of cases dysmenorrhea in young women is caused by endometritis.

3. Absolute inadequacy of treating dysmenorrhea and the coexisting endometritis by purely mechanical measures.

4. The constitutional nature of dysmenorrhea and, consequently, the necessity for the carefully indicated remedy.

Formalin in the Treatment of Superlative Otitis Media.

Nathan G. Ward says, in American Medicine, that by the judicious use of formalin the following results may be obtained:

1. Fetid odor quickly disappears.

2. There is an early cessation of the discharge.

3. Protects against the formation of granulations, and small granulations are destroyed by alcoholic solutions.

4. Promotes healing of ulcerated mucous membrane, skin abrasions, and inflammation of the external auditory canal.

5. Retards, but does not entirely check bone necrosis.

How to Treat Muscular and Joint Sprains of Railway Employees.

Haldor Sueve says, in The Journal of the American Medical Association, that in a vast majority of so-called sprains, there will be no elevation to be felt by the palpating finger, and in these cases the cold douche, and static electricity, both for its local and mental effect, gives remarkable recoveries. In his recapitulation he says:

1. Ligaments are rarely if ever torn in so-called sprains, and are never stretched. 2. The pathology in the majority of sprains is a rupture of the areolar and connective tissue around the joint, and a contusion of the lining of the joints. 3. Immobilization of muscles is not rest. On the contrary, in all sprains the muscles should have passive exercise the first few hours, and days, and active exercise after that. In the majority of cases active exercise should be instituted from the beginning. 4. The plaster casts should not be used at all, even in cases where we have a fracture, unless it be impossible to maintain a proper position of the joint. 5. Hydrotherapy in the shape of ice applied over a wet cloth the first few hours; water in the shape of hot fomentations or in the shape of the Scottish douche, where we wish a stimulation, is of very great value. 6. The counter-irritation of static electricity in conjunction with massage is the best treatment for a strain. 7. The ambulatory treatment of sprains in conjunction with massage is to-day the best treatment.

Hyperacidity.

H. Illoway, in the New York Medical Journal, says that in stomachs affected with hyperacidity the contents, after an Ewald and Boas breakfast, presented certain peculiarities which were not found with other morbid states of that organ. They are as follows:

1. The stomach contents are unduly large in quantity, even the minimum found exceeding by a considerable number of cubic centimetres the quantity ordinarily met with.

2. The contents are mainly, almost entirely, fluid, but very little solid matter being found therein. To this is added the further qualification, that the stomach is sufficient as to its motor function, i. e., the gastric muscles are of normal force and competent to accomplish their work in a normal manner. In view of the last qualification, the presence at the height of the digestive process of so large an amount of fluid is accounted for by an exaggerated secretion on the part of the stomach of the diluting fluid, a pouring out so extensive that the authors above referred to speak of a hydrorrhœa gastrica in this connection.

3. The specific gravity of the filtered stomach contents is much lower than that of filtered stomach contents from organs not so affected.

4. Amydulin is present in abnormally large quantities.

Analgesia From the Spinal Sub-Archunoid Injection of Cocaine.

The subject of cocaine anæsthiesia has been extensively discussed and is now quite liberally used by the profession. Its advantages in many instancis is well known. J. Garland Sherrill, in the Virginia Medical Semi-Monthly, says that cocaine analgesia will not likely prove satisfactory in operations above the level of the diaphragm; that it will perhaps not be much used in abdominal cases which are not clear and are likely to prove tedious or difficult; that its special field will be found in operations upon the lower extremity, including amputation and resections, and those of perineum, bladder and rectum; also that is at least useful in old persons and those suffering from diseases of the heart, lungs, or kidneys, from cirrhosis of the liver, and from abdominal dropsy; that it can be successfully employed where a patient feares general anæsthesia, and we certainly throw aside a valuable addition to our armamentarium if we neglect to use this method in the proper cases.

Appendicitis Perforation in Irreducible Right Scrotal Hernia.

The appendix is a curious littl body, it is just like a little fice dog, always in the way. In a carefully prepared article by O. Thieuhaus, in the New York Medical Journal, he gives a brief review of his article as follows:

First, as it is almost a law nowadays that in all gynæcological abdominal operations, especially in cases of inflamation of only the right annexa, the appendix demands strict observation and removal, if necessary in a manner illustrated by Howard Kelly (22,) so the same rule must be followed in operations for hernia, and when we take into consideration that, as already cited, Colzi found in all cases of appendicular hernia the appendix in a state of chronic folliculitis, I probably do not go to far when I say that in every case of hernia in which we find the appendix as an inmate it must be removed according to the old rule *in prophylax est salus ægroti*. Second, where appendicular inflammation is present in a

hernial sac, operative procedure has to be advised immediately, and in case of in carcerations under such conditions every palliative method, such as ether refrigeration, though known for a long time but recently recommended at a meeting of the Paris Academy of Medicine (23) or attempts at taxis, are entirley objectionable procedures. Third, in cases of appendicular abcesses in a hernial sac or gangrene of the appendix, resection and free drainage without reduction ist he appropriate treatment, and if incarceration exists, this has to be relieved and the peritoneal cavity walled off carefully by iodoform gauze. The radical cure of the hernia, of course, has to be delayed, under these conditions, till the signs of inflammation have subsided.

Decortication of the Lung for Chronic Empyema.

This is a term applied to designate a procedure intended to relieve the lung from its environment in cases in which expansion is prevented or interfeied with by the presence of a greatly thickened plural covering. George Ryerson Fowler, in Medical News, asserts the following conclusions pertaining to this subject:

Conclusions.—Decortication of the lung is an operation adapted to all cases of old empyema in which extensive and pre-operatively discoverable tuberculous lesions of the lungs are not present, and in which the patient's condition will permit of a major operation. (2) It may be advantageously substituted for Estlander's operation in the majority of instances in which the latter has been considered, up to the present time, as being indicated, since it is more a rational procedure in that it combines the advantages of restoration of function of the lung, so far as this possible. with closure of the empyemic cavity. (3) It should replace Schede's operation in all cases. (4) The method by extirpation of the diseased portion of the pleural membrane, including the visceral, cortical, and diaphragmatic portions, is the operation of choice. (5) Failing this, visceral pleurectomy should be selected. (6) Pleurotomy, with simple detachment of the visceral layer of the diseased pleural membrane, gives sufficiently good results to warrant the surgeon in resorting to this procedure in cases in which the condition of the patient will not permit of the application of the other and more desirable methods. (7) Whatever operative method is adopted, as complete access to the cavity of the chest as possible should be obtained, and rapid closure of the opening in the chest-wall afterward secured, since the complete re-expansion of the lung must depend largely upon the normal respiratory movements. (8) Pulmonary or respiratory exercises should not be neglected in the after-treatment, since these aid greatly in the restoration of the function of the lung.

The Diaguosis and Surgical Treatment of Rura Tuberculosis.

Concerning this subject, F. Tilden Brown, in the Boston Medical and Surgical Journal, says that too great pains cannot be taken by physician and surgeon to determine the location and extent of the disease before determing upon the treatment. The integrity of the other kidney, of course, has great bearing on the surgical aspects of any case. To determine in any particular case just what rate of progress the disease may pursue if left untreated, or what degree of immunity from some of the annoying symptoms we can promise the patient by a nephrectomy, is not easy.

In ward hospital cases the immediate operation appears to be the only alternative. For those who can afford climatic changes and rest a careful preliminary observation of the existing conditions of the urinary tracts should precede their travels, and the same examination, when at all indicated, should be repeated in order to keep posted regarding such an advance of the disease as to call for operation.

Difficulties and Dangers of Anesthetics.

Ever since the first death from chloroform and ether there has been much discussion as to the manner in which they cause them. Daniel N. Eisendrath says that ether, with its bad effects upon the kidneys, is by far the safest anesthetic. Chloroform kills quickly; ether slowly. The dangerous symptoms of the former are for less amenable to treatment than those of the latter. Children respond more quickly than adults to efforts at resuscitation.

Internal Medicine in the Nineteenth Century.

The paragraph below is taken from an oration by N. S. Davis, in the New York Medical Journal:

Prevention of diseases is only possible when a knowledge of their causes, their mode of dissemination, and methods for their suppression, are possessed by all the people. Medical men alone cannot stop their spread, nor will the making of laws do it. Only the intelligent co-operation of

those who are well can accomplish it. It must not be expected, therefore, that so soon as the cause of a disease is discovered, that ailment can be suppressed. Time is required in which to educate all classes of people on that particular subject. Unfortunately, many persons are so obtuse that they will not believe in methods of prevention when the fullest demonstration of their success has been made. A notable instance of this is seen in the recent repeal in England of laws which made vaccination compulsory. The ease with which drinking-water may become contaminated and the danger of health from contamination are not even now appreciated by the public. It is partly because such thorough knowledge is needed by the laymen that turberculosis, diphtheria, pneumonia, typhoid fever, and similar troubles have not been better controlled in the past. In order that in the twentieth century the fruits of the great discoveries of the last may be gathered, all members of the medical profession must fit themselves to teach their patients what is known of disease and its prevention. Those who are specially adapted to do so must disseminate their knowledge by popular discourses and essays. When hygiene shall be regarded by all classes as necessary, and as much a matter of course as the use of the railroad, steamboat, the telephone, and labor-saving machines, then, but not until then, striking results may be expected.

Insanity in Women from the Gynecologic and Obstetric Point of View.

In quite a lengthy and comprehensive article in the St. Louis Medical Review, A. Lapthorn Smith says from a careful consideration of a large number of recent articles by writers of great knowledge of this subject, added to the writers experience, he feels justified in coming to the following conclusions:

1. Insanity is not hereditary, as is generally supposed, but it is sometimes contagious.

2. Insanity, in the majority of cases, is not due to organic disease of the brain, but to functional disorders of its circulation and of its circulating fluid.

3. In many cases in women the disorder of the brain's circulation is caused by reflex irritation, carried by the sympathetic from the pelvic organs and caused by retroversion of the uterus, cirrhotic ovaries, fibroid tumors, etc.

4. In many cases it is the fluid circulating in the brain which is at fault; in some it is too poor in quality because the digestive apparatus is interferred with by reflex irritation of the sympathetic, due to a lacerated cervix. endometritis, etc.

5. In a lesser number of cases the brain is prevented from working because the blood is badly oxygenated or loaded with uric acid, urea, or other poisons.

6. Hundreds of cases are now on record of insanity being cured by removal of the cause; the greatest number of mental cures having followed ventrofixation and the shortening of the round ligaments, for the removal of retrodisplacements, whtle many others have followed the ablation of fibroids, cirrhotic ovaries, the repair of lacerated cervices and even curretting.

7. Such being the case it is the duty of the family physician to examine carefully every woman in his practice who becomes insane, or to have her examined by a gynecologist, and if any pelvic disease is discovered it should be remedied.

8. It is the duty of every medical superintendent of an insane asylum to have a systematic examination made, preferably under anesthesia, so that unsuspected sources of irritation of the sympathetic situated in the pelvis may be removed. In one asylum alone this course has resulted in improvement in 66 per cent, and recovery mentally of 42 per cent of those operated upon, although the pelvic troubles had existed for from six to sixteen years.

9. If anything is done it must be done thoroughly, as several cases have been reported where no benefit resulted until a second and more complete operation was performed.

10. In view of the number of women who become insane from uremia, more care should be exercised by practitioners in preventing this condition. All Protestent physicians should, with the advice and approval of one or two colleagues, empty the uterus before the kidneys become permanently damaged. (Catholic physicians are not allowed by their church to sacrifice the ovum in order to save the mother.)

Motor Cars for Medical Men.

A strong and able article appears in the British Medical Journal by W. Worby Baumont creating the best and most trustworthy vehicle for the physician to purchase. He says no hard and fast rules can be laid down for the guidance of the purchaser. His car should—

1. Have only two seats, or, if a third seat, then it should be one that does not in the least interfere with accessibility of the machinery or moving parts.

2. Not to be geared to more than about eighteen miles per hour.

3. The motor should run at a moderate speed, and should be of not much less than 5-brake horse power.

4. Have ample cooler capacity, and either no pump or a good strong simple one.

5. For some time at least adopt solid tyres or compound tyres.

6. Three speeds forward are desirable, the lowest being such as will enable the car to mount the worst hills in the district to be worked, when the roads are in bad condition, at the highest speed properly within the power of the motor. Three speeds may not be so necessary in flat districts, or with a belt-driven car with a two-cylindar motar, fitted with throttle or supplementary valve and ignition-timing device. Reversing gear is desirable, although not indispensable, in a small car.

7. The gear should be of the best, proportion good throughout, not in parts only; should run in oil or grease, or be well protected, and should obviously have been made for a car and not for a clock.

8. The brake or brakes should be strong throughout all the parts and connecting rods or links, and the brake drums of some size. One good set of brake gear is better than three of the flimsy things that by luck more than wit have so often been just sufficient.

9. Electric ignition is employed on nearly all the cars mentioned, and there is not much to choose between the several arrangements used. It is doubtful, however, whether for the purpose in view the tube ignition should not be considered equally good, although it takes a minute or two or three minutes longer to get ready. This need not, however, be lost time, if matches and spirit can be systematically placed ready for use; so that, having started the lamps, the tubes are hot by the time hat, coat, and gloves are on, and the thermometers and things in the right pockets. For absolute certainty tube and electric ignition may both be used by those who care to pay for the fitting and fittings.

10. As a doctor cannot make his own car, his choice is limited to the cars that are made, as none may comprise all he thinks he would like or looks nice, he must choose that car which comprises the most of the practical working essentials, and should not be much guided by his own preferences until he has some experience of the actual working use of a car.

No useful purpose can be served by giving engravings from photographs of the several kinds of cars mentioned, because the bodies of any of them may be varied in form, and the construction of the mechanism could only be fully illustrated by numerous engravings such as those which occupy hundreds of pages in my book on motor vehicles.

In conclusion, I would repeat that the motor vehicle is not for those who have no patience with machinery, or for those who find it difficult to discriminate between the treatment necessary for a wheelbarrow and a lathe or a sewing machine; but for those who have this patience and discrimination the motor vehicle is a source of new and health-giving pleasure and of the profit that comes to those who can utilize the working hours that are saved from the time waste of the old mode of travelling.

Movable Kidney; Its Cause and Treatment.

Movable kidney has of late years become quite a prominent trouble. They are usually classed as fixed organs, but they possess normally quite a range of motion. M. L. Harris, in the Journal of the American Medical Association, from his observation, gives the following conclusions in reference to movable kidney:

1. The essential cause of movable kidney lies in a particular body form.

2. The chief characteristics of this body form are, a marked contraction of the lower end of the middle zone of the body with a diminution in the capacity of this portion of the body cavity.

3. This diminution in the capacity of the middle zone depresses the kidney so that the constricted outlet of the zone comes above the center of the organ and all acts, such as coughing, straining, lifting, flexions of the body, etc., which tend to adduct the lower ribs press on the upper pole of the kidney and crowd it still further downward.

4. It is the long continued repetition, in a suitable body form, of these influences, which collectively may be called internal traumata, that gradually produces a movable kidney.

5. A distinctly movable kidney is never the immediate result of a single injury or external trauma.

Lobar Pneumonia.

Christopher Graham, in the Indian Lancet, says:

The medicines that find most favor are, first, strychnine, because of the general muscular effect and its direct cardiac and respiratory stimulation. It is given all through an attack, and pushed when failure threatens. Calomel is recommended be-

cause (1) of its action on the bowels, as it removes germs and toxines, and it directly lowers blood-pressure; (2) as an antiseptic along the digestive tract; and (3) as a diuretic. Alcohol and digitalis have strong support from the majority. Oxygen inhalation is looked upon with great favor. Morphine is necessary for pain, and it also quiets and guards the heart. Veratrum viride and tincture of aconite find favorable use by many in the early stages of sthenic cases, while others contend that we should never use a heart-depressant. The coal tar products find but little favor. Petresco, Maragliano, and quite a following, claim specific action for digitalis, and use it in large doses: and they claim such doses are necessary and well borne, because of its power to counteract toxins. Nitroglycerine has many friends, because of its power to rednce blood-pressure, and at the same time to stimulate the heart. Ammonia compounds, acetates and other alkalies find use for softening the cough and hastening expectoration.

Medical Colleges and Professional Standards.

Medical colleges to-day are very numerous. Every town of any size has a medical college. The standard reached by the many of these numerous colleges is not high, and the results are seen by the number of students who fail before the State Medical Societies when they apply for license. Inez C. Philbrick has an interesting article in The Journal of the American Medical Association concerning medical colleges, in which he says:

Medical colleges exist far in excess of any public need. Like the country store which doles out its inferior wares at every cross-roads, a so-called medical college is found in almost every town of generous size; and to obtain a medical degree is within the possibility, intellectual and financial, of any youth, however lacking in mental and moral fitness. In inverse ratio to the frequency of medical colleges do we find the extent of their equipment. In the majority of cases they possess few facilities for demonstration; are located in towns where there is not a sufficient number of dependents to furnish requisite clinical material; and generally have as instructors men of mediocre or less ability. The same law that holds in trade, to-wit, that the best interests of the consumer are served by bringing him as near as possible to the center of distribution, obtains as regards medical instruction. The resport of the United States Commissioner of Education for 1899 notes 151 medical colleges. The recent estimate of the Secretary of the American Medical Association is 173. No doubt the latter figure is more nearly correct. As an institution of local ill-fame and more than average depravity is not noted in the list it is probable that other choice institutions throughout the land do not appear in this report. The total number of medical colleges in Austria and Germany, with a population greater than in the United States, was in 1898, twenty-nine. In the same year, Great Brittain, with a population more than half ours, had seventeen. The editor of the Medical Record, commenting upon the discrepancy, while admitting the greater need of America by virtue of its less dense population, adds: "But we do contend that when a city the size of Russia, the craze for multiplying these schools is being carried to absurd and harmful lengths." As regards the establishment of medical schools there seems to be but one governing idea, that they may have life, considered in a purely quantitative sense, and have it more abundantly. Instead of bending its energies to the eradication of the large number of medical schools which are a blot upon its escutcheon, the profession establishes ever more, perhaps reasoning homeopathically that one poison will antidote another. A motto which might appropriately adorn the portals of many of our medical colleges, were fitly expressed in the lines of the old doggerel: "Will you walk into my parlor, said the spider to the fly?" Being generally a very inexperienced fly, fresh from sylvan groves, he often accepts the invitation, and can never thereafter extricate his feet from the mesh of inadequate instruction and indifferent example found therein. Professional welfare is not a desideratum in the founding of most medical colleges, they being merely reflectors of personal ambition. To most men the good of the moment is paramount. Few there are who, tempted upon the mountain of personal ambition, offered a professor's title or an enlarged fame and clientele, can, following the Nazarene, exorcise Satan.

Orchitis and Epididymitis.

Orchitis or epididymitis occurring as a complication or sequel of typhoid fever was first alluded to by Velpean in 1844. It is probably that the frequency of this complication is greater than statistics indicate. After gividg several cases Francis P. Kennicntt, in Medical Record, offers these interesting conclusions:

1. Epididymitis or orchitis occurring in the course or during the convalescence of

typhoid fever is a rare lesion and is of typhoidal origin.

2. Only very exceptionally is it due to secondary microbic infection.

3. It develops at a late period in the disease or during convalescence.

4. The lesion, although as a rule unilateral, may be bilateral; and involves either the epididymis or testicle or both, and not infrequently the cord.

5. Effusion into the tunica vaginalis is rare.

6. Termination most often is by resolution.

7. Suppuration occurs in twenty-five per cent. of all cases.

8. Localized necrosis and extrusion of testicular tissue is not uncommon.

9. Exceptionally there is destruction of the entire testicular structures.

10. Atrophy of the testicle occurs, but is a rare sequence.

11. The lesion gives rise to little constitutional disturbance.

12. Death as a direct result of the lesion has not been noted.

Abdominal Versus Vaginal Hysterectomy.

Henry O. Walker, in the Southern Medical Journal, is a great advocate of the abdominal route for complete hysterectomy, and gives his reasons as follows:

First, you are better able to see what you are doing; second, you are much better able to control hemorrhage than by the vaginal route, where you are working in a dark cavity; there is less liability of slipping of the ligatures, and if they do slip they are got at more easily than by the vaginal section; third, the danger to the ureters is minimized, and if injured the opportunity for repair is better, while if injured by the vaginal route you would have to do an abdominal section to make the repair; fourth, the prevention of sepsis is more certain by abdominal than by vaginal section, aided in the first instances by the Trendelenberg position, which gives opportunity for full protection of the intestines and peritoneum, while in the latter the opportunity for protection is limited, as it is an utter impossibility to render perfect asepsis in the vagina where there has been a long-standing infectuous disease.

Electricity.

F. A. Bickel says, in the Wisconsin Medical Recorder, the reason so many physicians call electricity a humbug is—

One. On account of the utter ignorance of the pretenders, who, in their darkness, go so far as to boast with their ignorance.

Two. To prove their ignorance, they buy and advise to buy utterly worthless so-called electric machines.

Three. The hungry grab of the machine makers—producing worthless trash to sell to the ignorant doctors, gulling them with polished quarter sawed box, nickle plated ornaments, etc.

The Etiology of Yellow Fever.

There has been a great many theories as to the cause of this fever. The conclusions given below from the pen of Walter Reed, in the Sanitarian, are valuable:

1. The mosquito serves as the intermediate host for the parasite of yellow fever.

2. Yellow fever is transmitted to the non-immune individual by means of the bite of the mosquito that has previously fed on the blood of those sick with this disease.

3. An interval of about twelve days or more after contamination appears to be necessary before the mosquito is capable of conveying the infection.

4. The bite of the mosquito at an earlier period after contamination does not appear to confer any immunity against a subsequent attack.

5. Yellow fever can also be experimentally produced by the subcutaneous injection of blood taken from the general circulation during the first and second days of this disease.

6. An attack of yellow fever, produced by the bite of the mosquito, confers immunity against the subsequent injection of the blood of an individual suffering from the non-experimental form of this disease.

7. The period of incubation in thirteen cases of experimental yellow fever has varied from forty-one hours to five days and seventeen hours.

8. Yellow fever is not conveyed by fomites, and hence disinfectiou of articles of clothing, bedding, or merchandise, supposedly contaminated by contact with those sick with this disease, is unnecessary.

9. A house may be said to be infected with yellow fever only when there are present within its walls contaminated mosquitoes capable of conveying the parasite of this disease.

10. The spread of yellow fever can be most effectually controlled by measures directed to the destruction of mosquitoes and the protection of the sick against the bites of these insects.

11. While the mode of propagation of yellow fever has now been definitely determined, the specific cause of this disease remains to be discovered.

Emergency Surgery in the Country.

The pratice of surgery in the country is done under all kinds of disadvantages, yet the results obtained are often as good as if done in the most modern hospital. Edward Wallace Lee, in the St. Louis Medical Review says:

The country surgeon, to meet successfully the many emergencies that may arise, must be alert as to the possibilities he may encounter; must be of a cool temperament; must be capable of managing serious situations; must have ability to control people, and must constantly keep in mind the fact that he may be called to see cases which, although rare in his daily practice, he must be prepared to treat successfully. A good habit for any surgeon to cultivate is the habit of day dreaming, that is, picturing in his mind various emergency cases and how he would treat them if circumstances demanded it. Think over the possibility of certain cases of emergency—how they might arise, the anatomy and physiology of the parts involved, and what to do if called upon to meet such a contingency, for often life depends upon the character of the treatment given by the first aid to the injured, or to the sufferer from some acute pathologic condition demanding immediate and scientific treatment to bring about a successful result.

Complicated Ovarian Tumors

Emil Ries, in St. Louis Medical Review, reports two cases of tumors with operations, because of their interesting diagnostic difficulties he emphasizes two points:

1. If a pelvic suppuration appears to be present and the history of the patient gives no clue to its cause; remember suppurated ovarian tumors! This is important because

2. Conservative operations which might be successful in simple pelvic suppurations, would fail to cure suppurated ovarian tumors.

Frequent and Unavoidable Deformity from Traction in the Upper Third of Shaft of the Femur.

Oscar H. Allis explains in the Indian Lancet why we have these deformities, He says:

The treatment prescribed by all authorities in all fractures of the femur is extension and fixation. In no hospital in Christendom, and in no work on surgery, will there be found any dissent from these two cardinal principles; and yet deformity from fracture in the upper third of the femur, angular and crippling, will be turned out from the best hospitals in the world during the last year of the nineteenth century. Has it ever occurred to the surgeon and teacher that extension in fractures of the upper third of the femur is alone capable of producing angular deformity? The traction exerted from the lower fragment can only influence the upper fragment through the attached soft parts, vis. periosteum tendinous attachments of muscle, fasciæ, and skin. Now when the tendinous attachments are freely torn the traction does not act at the points of fracture, but it may be at one, two, or three inches back from it, and as the femur is a bent bone the traction produces a tilting. The upper fragment may be displaced by the action of muscles attached to it; but another cause, and that independent of these muscles, is the group of long muscles that extend from the pelvis to the lower fragment. The action of these muscles is to produce shortening of the limb and outward angular projection of the fragments.

The Mental Diseases of Childhood

William B. Mayes, in the New York Medical Journal, writing in reference to this subject says.:

While most of the mental faculties characteristic of adult man are present before the third year, it is the exaggeration of some mental faculties and the slight development of others that distinguish a child psychologically from an adult Imagination during early childhood will be at its highest point. Not only such individual mental characteristics as fear, love, selfishness, vanity, generosity, jealousy, grief, or anger may be strongly developed, but the most rapid variations from one to the other may occur and are certainly not pathological. In its play, a child's imagination stops little short of hallucination. These mental traits may be brought under control to some extent as the months pass by, but it is curious to note how the earlier traits reappear during sleep, especially in nightmare and mild delirium. A child who is fearless by day may become frantic with fear by night. Free as the imagination may be by day, at night it often seems to run wild with all sorts of queer ideas and fancies. Given the toxæmia of a poorly digested meal or a little fever, and this superexcitability of the brain and special senses becomes very marked. In a child with a definite neurotic heredity, nocturnal delirium is caused by the slightest febrile disturbance, just as convulsions easily occur in younger children of the same sort under the same conditions.

The Needs of a Live Medical Society.

Every physician appreciates the need and usefulness of Medical Societies and I think nearly all the counties in the state have well organized Medical Socities. Francis Schill Jr. in the Pennsylvania Medical Journal says:

The meetings should not be so frequent as to prove a burden to the conscientious attender, neither should they be so far apart as to endanger carelessness in attendance. There should not be too much formality, just enough to conduct the session orderly. Let it not degenerate into a babble where everyone tries to speak at once, but rather let it be as a personal or confidential talk with a consultant. This will greatly aid a backward member to express his ideas. In times of local epidemics let special meetings be held, if necessary, to discuss the public welfare. If an evening session meets the needs of its members, such as obtains in the larger cities, by all means have them. And have as far as possible meetings in the different localities where members may reside. In the summer go to the more rural communities and make a day of it, for relaxation is as necessary as work. And when meetings are held in these places let the city brethern attend them as well as those in their own city, for reciprocity in such matters is no more than just and should prove a pleasure.

Gastro-Intestinal Infection of Children.

J. C. Ballard, in the Mississippi Medical Rocord, says to reduce excessive temperature in this disease, a tepid bath is most satisfactory. Never use a coal-tar antipyretic in these cases.

Let the child have all the hot water it will drink, but for nourishment rely on Ducro's elixir or liquid peptonoids. Later, a small amount of hot chicken broth may be used- In treating cholera infantum, let us always remember that we are really treating a case of poisoning, and bend every effort to rid the system of the poison and its products, and to maintain the strength of the child.

Neurasthenia, Its Diagnosis.

Walter L. Barber, in the Public Health Journal, epitomizes his belief on the subject of neurasthenia as follows:

1. Neurasthenia, having no anatomical basis or fundamental lesion, is not a disease but a state.

2. Investigation has settled nothing up to date, but *seems* to prove that changes characteristic of this state takes place in the nerve cell.

3. It is impossible to separate by arbitrary lines its relationship from other psychoneuroses.

4. All mankind may be, may have been, or may become sufferers of this nerve state.

5. A comprehensible classification of this nerve problem can be solved only by a closer physiological and psychial study of the mode of origin of its symptoms.

6. To diagnose and determine such a condition from true diseases, with similar syndrome of symptoms has been unsatisfactory to the writer, and probably undesirable to the hearer.

Ophthalmia Neonatorium Prophylaxis.

Ophthalmia neonatorium is, with the single exception of atrophy of the optic nerve, the most frequent cause of blindness. Frank Todd, in concluding an article in the Indian Lancet, suggests the following rules:

1st. That whenever possible and practical the head be delivered without rupturing the membranes.

2d. That in all suspicious cases and in all cases born in public hospitals Crede's method including the use of 2 per cent. silver nitrate solution be practised.

3d. That in all cases where Crede's method is not practised the eye lids and face be mechanically cleansed with an aseptic solution, and one or two drops of a 5 per cent. protargol solution be dropped in between the open lids.

4th. That when the disease appears in one eye the other one be immediately protected by a shield, or (if this cannot be immediately procured) any kind of a clean covering that will prevent the well eye from becoming infected.

Plague in New South Wales.

Albert S. Ashmead, in the St. Louis Medical and Surgical Journal, says the teachings of this epidemic of plague seems to be as follows:

1. The disease was not directly communicated from the sick to the well—in other words was not "catching."

2. It was not communicated in any important degree, at all events, from the sick to the well by mediate channels (clothes, household goods, merchandise, excreta).

3. The infection attached to localities and spread to others adjoining and continuous with that in which it was first manifested.

4. It also spread in a fashion which betokens the possibility of its being transported mechanically from an existent focus to a

considerable distance (Moore Park garbage tip, and Manly,) and there initiating an independent focus.

5. In the buildings on any infected locality cases occurred irregularly, and showed no special proneness to occur in adjoining houses.

6. When the occurrence of one case among the inhabitants of a building showed that the infection was present in its secondary cases rarely followed. Irregularity of incidence on houses was accompanied with irregularity of incidence in the inmates.

7. An epizootic disease among rats preceded the first case which occurred in man.

8. This epizootic disease was plague.

9. The area over which the epizootic extended was practically co-extensive with that on which cases of plague in man were observed.

10. The epizootic died out, as far as can be learned, at the same time as the epidemic ceased.

11. The epidemic was caused by communication of the infection from rats to man.

The Toxin of the Colon Bacillus.

Interesting facts are given as follows by Victor C. Vaughn in American Medicine:

1. The toxin is contained within the germ-cell from which it does not, at least under ordinary conditions, diffuse into the culture-medium.

2. The toxin is not extracted from the cell by either alcohol or ether.

3. Very dilute alkalis do not extract the toxin from the cells.

4. The germ-substance may be heated to a high temperature with water without destruction of the toxin.

5. Boiling with a 0.2 per cent. solution of hydrochloric acid has but little, if any, effect upon the germ-ell or its contained toxin.

6. Heating the germ-substance for an hour at the temperature of the waterbath, with water containing from 1 per cent. to 5 per cent. of hydrochloric acid, breaks up the cell wall and lessens, but does not destroy, the toxicity of the cell-content. Prolonged heating may render the toxin inert.

7. The toxin as separated from the cell-wall by digestion of the latter with hydrochloric acid and pepsin is markedly active.

The Pupil in Health and Disease.

In reference to this subjoct E. D. Payne, in the Pennsylvania Medical Journal, says:

As a general proposition, it may be stated that a person in good health and not advanced in years will present a normal pupil of moderate dimensions, readily responsive to the stimulus of light and dilating quickly when the stimulus is withdrawn. If this does not occur, search must be made for the influences which affect the motility of the iris, either by local conditions or the reflexes by general conditions, and an habitually dilated pupil not the result of local conditions, is a very certain indication of lowered vitality or profound nervous disease. I have lately seen it stated that it is the earliest indication of tuberculous infection; and, taken with other evidences, considered diagnostic.

Some proofs That Vaccination Prevents and Mitigates Smallpox.

In an interesting article in the Indian Lancet, Charles J. Webster, reports the following conclusions:

1. That it diminishes the liability to be attacked by the disease.

2. That it modifies the character of the disease, and renders it (a) less fatal and (b) of a milder or less severe type.

3. That the protection it affords against attacks of the disease is greatest during the years immediately succeeding the operation of vaccination. It is impossible to fix with precision the length of this period of highest protection. Though not in all cases the same, if a period is to be fixed, it might, we think, fairly be said to cover in general a period of nine or ten years.

4. That after the lapse of the period of highest protective potency the efficacy of vaccination to protect against an attack rapidly diminishes, but that it is still considerable in the next quinquennium, and possibly never altogether ceases.

5 That its power to modify the character of the disease is also greatest in the period in which its power to protect from an attack is greatest. but that its power thus to modify the disease does not diminish as rapidly as its protective influence against the attacks, and its efficacy during the later periods of life to modify the disease is still very considerable.

6. That revaccination restores the protection which lapse of time has diminished, but the evidence shows that this protection again diminishes; and that, to insure the highest degree of protection which vaccination can give, the operation should be at intervals repeated.

7. That the beneficial effects of vaccination are most experienced by those in whose case it has been most thorough.

These are the final conclusions of the latest and the greatest vaccination commission.

Treatment of Puperal Convulsions.

There is no other condition where the skill of the physician is called more into play, where his cool judgement and rapid decision may accomplish more than in the management of puperal convulsions. The treatment as given by C. L. Hood in the Medical Visitor is as follows:

First give from ten to fifteen minnimums of Norwood's tincture of veratrum viride hypodermically; empty the rectum and colon; then fill the colon, if possible, with normal salt solution. If there be difficulty in using the normal salt solution in the colon—if she will not retain it as sometimes occurs—the salt solution may be given intravenous, or even the abdomen punctured, under thorough antiseptic precautions, and the solution injected into the abdominal cavity. This can best be done just above the fundus of the uterus, crowding the intestines up so as not to injure them. We would not advise this procedure except in extreme cases, but we have twice used this method with success, not a harm following.

If the pulse does not drop to eighty or less in thirty minutes, repeat the dose of veratrum viride, and it may be repeated again in an hour.

There can be no question that bleeding does good. From one to two pints of blood may be taken from the veins and normal salt solution injected, injecting one-third more of the salt solution than of blood was drawn. Chloroform may be administered until the other remedies have timeto take effect. As soon as the patient can swallow, four grains of calomel with five grains of bicarbonate of soda, should be given in capsule, to be repeated in two hours followed in four hours by some saline catharthic. Calome is by far the best drug to use after a woman has once had a convulsion. It may be given in from one-fifth of a grain at night to one grain at a time three times a day, followed in the morning by a seidlitz powder, Rubinyat water, or some saline solution. Chloral hydrate in from ten to twenty-grain doses, either per mouth or per rectum, is a remedy to be thought of and to be given a trial should other means fail.

We believe that by the use of Norwood's tincture of veratrum viride and the adjunct treatment, many cases of puerperal toxemia can be bridged over to full term.

Sanitation and Prevention of Tuberculosis.

Concerning the important subject of Sanitation and Prevention of Tuberculosis, M. H. Seibert, in The Pennsylvania Medical Journal, says:

A large number of tuberculous patients cannot be properly treated in their own homes and unless some institution as a sanitarium is at hand to which these patients can be removed they are given no fair opportunity to be cured, for medical treatment with unsanitary envionments and poor, indigestible and insuffiient food is quite unavailing against tuberculosis. Hence, to meet this requirement there should be a public sanitarium, maintained by the State if need be. When the large number of deaths annuall is taken into consideration as well as the loss estimated at upwards of two hundred millions of dollars annually in the United States, it seems somewhat surprising that, knowing now as we do that so much of this could be avoided, that no greater effort has been made by the various State governments to render assistance in this direction. This is notably true in Pennsylvania, for, situated as it is, with excellent natural advantages, elevated and dry as well as well sheltered localities in abundance, in fact, Pennsylvania has within its borders some ideal situations for such a sanitarium as needed to cure tuberculosis. No greater or nobler charity can be allowed bestowed than to alleviate and cure these thousands of suffers and it is to be hoped that the State will step in and render such assistance as seems proper and needed in these cases. Here, also, it seems to me, is a fruitful field for the philanthropist—for the altruistic millionaire. To what nobler use can he dedicate a charity of endowment than to the cure and aleviation of the dying thousands? Let our hopes of improved facilities for treatment of these cases be realized, for with the expected reporting and registration of these cases with a view of rendering intelligent information and service to the patients and with such State legislation as will enable us to exercise a proper supervision over dangerous cases as well as of the maintenance of public sanitariums, it is no exaggeration to say that every year will witness a gradual and substantial lessening of the number of cases until finally the percentage of cases as compared with other diseases will be nearer a minimum instead of a maximum as is now the case.

The Treatment of Abdominal Aortic Aneurism.

There has been undoubted improvements in the technic of wiring an electrolysis as applied to the cure of aortic aneurism. Rudolph Motes, in American Medicine, says, as a result of the modifications brought about by the combined efforts of surgeons and physicians who have labored to perfect both the surgical and mechanics

electric phases of the technic, the essential features of the method resolve themselves as follows:

1. A thorough exploration of the tumor, made safe by aseptic celiotomy, which permits a recognition of the approximate anatomic seat and relations of the tumor and furnishes important information as to its anatomic characterics—an advantage that is denied in thoracic aneurysms.

2. The safe exposure and even permanent isolation of the point of attack in the most accessible part of the tumor by the formation of adhesions between the sac and the abdominal wall—a point which we believe has been shown to greater advantage in the two cases that are reported in this paper, though the methods adopted by Dr. Parham and myself were different and we were guided by different purposes—is worthy of adoption in all cases, as it diminishes shock and the liability to peritoneal contamination.

3. The introduction at a second sitting (when adhesions have formed and the sac has become practically extraperitoneal) of a highly drawn fine snarled silver wire, which should not exceed a No. 8 gauge (0.0085 of an inch) in diameter. The wire may be of gold, as suggested by Stewart, or of silver blended with copper alloy, as suggested by Hunner; but it is evident from our experience and that of others that sterling silver will meet all the indications.

4. The wire should be fed or carried into the aneurysmal sac through a fine and carefully insulated trocar or canula (shellac, celluloid, or rubber being used as the insulating agents, shellac being most convenient), the caliber of the canula not exceeding a No. 2 Dieulafoy aspirating needle.

5. The wire should be always tested before its application, to determine the following points: (*a*) That it will coil after feeding through the canula; (*b*) that it will coil in large, irregular loops, in order that its distribution over the largest possible surface may be insured; (*c*) that it will not form a short continuous spiral with such spring and force as to exercise injurious pressure upon the aneurysmal walls, or, after finding its way into the aorta through a large orifice, spring, as it were, into the heart itself. Furthermore, it is important that the quantity of wire used should be adjusted to the size of the aneurysm, in order that the retraction of its walls after coagulation may not be interferred with (as happened so disastrously in several instances) owing to the resistance offered by the wire itself. As a rule, 10 feet of silver wire, highly drawn and snarled, will suffice for the average aneurysm, though larger quantities (15 and 20 feet) are advised according to the size and approximate capacity of the aneurysm. Practically it may be said that 10 feet are amply sufficient, as is proved by the fact that in the 3 recorded cases in which a permanent cure has been obtained (Morse, Langton, Noble) the maximum length of the wire was 10 feet.

6. As to the electrolytic current, this should be furnished by a galvanic battery (the portable dry chlorid of silver appears to have been most generally used in this country), with the positive pole attached to the wire and the negative electrode, well covered with a wet cloth, to the back. A milliamperemeter should be connected with the circuit to indicate the strength of the current, which, according to the most authorized opinion, should not exceed 70 milliamperes, for fear of caustic effects. The intensity of the current and the duration of its application will vary within wide limits, according to the condition of the patient and the effect upon the tumor. By following the plan adopted in our case the sitting was prolonged 4 hours and 20 minutes without any appreciable bad effects. Without a previous celiotomy and the preliminary formation of adhesions, which made the sac practically extraperitoneal and rendered general anesthesia unnecessary, so long a sitting would have been impossible without great risk of peritoneal contamination and shock.

7. The coincident administration of gelatin (3% gelatin dissolved in decinormal saline solution, .7% salt) in a 6 or 8 ounce doses by hypodermoclysis, as suggested by Lancereaux, may prove beneficial as an adjuvant to rest, diet, and other general measures of treatment.

Simplicity in Therapeutics.

The evolutions of medical practice, assisted by sanitary science, that brightest star of the closing century, has curtailed the once unlimited boundary of therapeutics, and has simplified its methods. Edwin W. Pyle, in American Medicine, says:

The alpha and omega of typhoid fever prescribing is no longer quinine, but diet and nursing. Innocent childhood with innocuous croup is no longer vomited with turpeth mineral, but is equally relieved by the gentleness of aconite and spongia; and in diphthera, the long list of horrid doses has been given way to antitoxin and supportative treatment. While in puerperal convulsions the unfortunate victim of her own economy is no longer held in the vise of overpowering hypodermics, but the system is rationally relieved of poisoned blood

and the life-giving impetus of an intravenous transfusion takes its place.

Having been reared under influences which prompted relentless dosing for every ailment; when Watson was the authority recommending the scarifying and blistering of every pneumonic patient; when water was denied to the burning thirst of fever till tongues were parched and nights were filled with dreams of constant drinking; having lived to see the decadence of nauseating compounds and temporizing dilutions, we thrice welcome the uprising of a new dispensation of medicine, which puts faith in natural methods and a few well-proven drugs, simply administered.

Were we to retrospect 30 years of general practice, to select one from many experiences, to leave as a parting injunction to the rising generation of physicians, it would be a request in the interest of humanity to simplify prescribing, in using the smallest dose and the least medicine possible to accomplish the therapeutic purpose.

Relation Existing Between the Sexual Organs and Insanity.

J. W. Robertson, in the Indian Medical Record, says: "No subject connected with medicine has attracted greater attention than that of the relationship said to exist between the functional neuroses and the reflex irritations from diseased bodily organs. There was no insufficiency of eye muscles; no error of refraction; no defected septum or nasal growth; no disease of the stomach, liver, kidneys or sexual organs which could not be made to account for an existing megrim, epilepsy, neurasthenia or insanity. Patiently we have had to unlearn much that our specialists have taught us. The clitordectomies of Baker Brown have almost been forgotten; the slitting operation of Sims is but rarely practiced; and the more recent tenotomies of Stevens have been discredited; while professional opinion is holding in check the thousands of oöphorectomies once so freely performed. Especially have the insane suffered at the hands of specialists, for above all neuroses insanity is supposed to have a reflex origin, and its causative relationship with the sexual organs has had general professional acceptance. So generally is this recognized by the public that no woman can become insane without her friends demanding uterine investigation. Like many popular superstitions, there is a grain of truth as a basis for these deductions. In many cases of insanity there is a periodical increase of violence; and in woman this increase seems to bear a close relationship to menstruation, either preceding, following, or complicating the period; yet the periodical outbreaks also occur in men. The ancients, more logical, if not more learned than ourselves, attributed it to the influence exerted by the periodical return of the full moon, calling it lunacy rather than to a condition which could not possibly affect the male. Ovulation and menstruation, so evidently complicating the mental state, drew attention to the organs of generation, and when it was found that oophorectomies could be safely performed, and their patients recovered after such mutilation, when gynecologists could conscientiously report that there was a slight uterine laceration or malposition, such diagnoses were accepted as responsible for the mental state. As a matter of fact, no woman who has borne a child is without laceration, and no two uteri hang exactly alike, these organs not being fixed, but designed to be freely movable.

The Treatment of Psoas Abscess by Incision.

This form of abscess has been extensively discussed and rather widely-differing views are held by men of experience. Robert W. Lovett says that fever is not necessarily an accompaniment of psoas abscess formation; that where it does occur the prognosis is not so good as where it is absent; that the best method of operation is by a lumbar or an iliac incision, one or the other, and preferably the latter. It seems, on general principles, desirable to avoid recumbency for long periods, which, of course, makes drainage by an iliac incision almost impossible. It seems, therefore, best to put on a plaster jacket almost immediately after operation to enable the patient to sit erect and to enable the abscess to drain almost from the first. In this way the writer has obtained better results than by any other method.

Hydrotherapy.

The use of water as a medicinal remedy has its supporters and its opponents. In Modern Medicine T. W. Keown writes instructively. He says:

Hydrotherapy means the application of water in disease; that is, water in any of its forms, vapor, liquid, or solid, internally and externally, not used empirically, but in manner as scientific and accurate as one would use ony other drug in the materia mediea. No one would think of prescribing digitalis and nux vomica without stating a definite preparation and a limited dose.

So it is in the application of water; we should always prescribe the kind of bath to be used, the temperature of the same, and the length of time occupied in taking it. One can readily see the lack of care and judgment in ordering a cold bath without stating the temperature, when the summer may be 65 to 70 degs., and in winter down to 40 deg.—considerable variations according to seasons.

Water possesses many properties which render it a very valuable medicinal agent. Its flexibility is shown by its change from solid to liquid, from liquid to vapor. It has the power of absorbing and transmitting heat, and its fluidity is such that it can be directed against the body in almost any form, as in the needle and shower bath; it can be made to strke the body in any direction from a hose-pipe, in the form known as the douche; and it can exert equal pressure all over the body in the full bath. The amount of pressure in the douche form is regulated by means of air or the height of water in the tank; and when so applied, influences the vast network or nerves and blood vessels in the skin, giving a fine massage to each portion, and, when properly managed, the effect is enhanced by decided tonic reaction.

Hydrotherapy is not intended to treat all cases alone; there are other drugs which are useful in disease; both go together, and by their combined use, the physician is enabled to give his patient the full benefit of his professional skill.

We are always aware of the many uses to which water is applied for other purposes of cleanliness. Examples are numerous. Ice is applied to allay inflammation, externally and internally; to sooth an irritable stomach, the ice-cap and ice-bag are favorites in ever-day use; boiling water and steam, as sterilizers in our surgical work; subcutaneous injections of salt solutions, in hemorrhage and heart failure; warm-water irrigations of the genito-urinary tract, in cystitis, etc.; and alimentary tract in diarrhea and dysentery and in cases of nephritis, as a very useful diuretic, increasing the action of the kidneys better than any other drug in the form of a high injection. Hydrotherapy deals with all the forms, but it is chiefly concerned by the application to the skin; acting principally through reflex nerve action; its effects are largely due to the degree of heat and to the mechanical irritation kept up during the bath. The effects are observed in the circulation, respiration, temperature, tissue metabolism and secretion.

Circulation.—Cold water, when applied to the skin, at first causes a slight shivering and palor of the skin, due to the contraction of the coat of the peripheral blood vessels, sending the blood onward and producing a collateral hyperipheral with increased blood pressure. This peripheral contraction is followed immediately by dilatation dependent on the mechanical irritation applied to the excitation of the inhibitory nerves; the collateral hyperemia stimulates the action of the muscular coats of the vessels beyond the point of irritation, and thus the blood is hurried along with increased volume and force toward the heart; here the effects on respiration shows itself; the respiration, at first shallow and deep, alternately spasmodic in character, soon adjusts itself, becoming deeper and slower. This enables the lungs to influence the circulation, and the ventricular contraction becoming slower and more forcible, peripheral dilatation has become evident, as is shown by tracings from the sphygmograph. We have then better circultion, better respiration, and better muscle tone.

All tissue change and all organic action depend on the amount of arterial blood in circulation, the activity of which enhances secretion and excretion. Following out these thoughts, and observing the biochemical changes, we find that there is increased consumption of O and increased elimination of CO_2. The total excretion of N is also increased, showing a better utilization of food, so also with urea and uric acid. The influence of baths on the excretion of N, urea, and uric acid is more marked after three or four days than at the beginning.

Typhoid Fever Simulating Appendicitis.

It is often difficult to differentiate accurately between typhoid fever and appendicitis. The elements of differential diagnosis are not easy to establish. Dr. Rendu, in the Medical Press and Circular, suggests the following presumptive signs:

(1) The contrast between the gravity of the general phenomena and the comparative slightness of the local pain; (2) the absence of muscular resistance; this is the best clinical symptom although it is not pathognomonic; (3) the existence of albuminuria, which is more frequently present in typhoid fever than in appendicitis; (4) the examination of the blood in appendicitis reveals a leucocytosis which does not exist in typhoid fever; moreover, according to Hayem, no fibrinous reticulum is formed under the microscope in typhoid-infected blood, whilst the formation of this reticulum is precocious and rapid in the acute inflammation of appendicitis. Unfortunately

I omitted to try this experiment at the time when the necessity of an operation appeared urgent.

Serum diagnosis, the value of which is very great when the typhoid fever dates from fourteen to fifteen days, more often than not fails to furnish any information at the beginning of the illness. Moreover, none of these signs has an absolutely pathognomonic significance.

Peritonitis may be marked in slight cases, and almost absent in very grave cases. The muscular resistance is not constant even after perforation has taken place.

Examination of the blood, no doubt, gives more certain results, particularly the serum diagnosis; but the reaction is rarely obtained in the first few days of the illness just when it is all important for us to be able to arrive at a diagnosis in order to decide upon treatment. We are therefore sometimes left in doubt, whence the necessity for temporising within reasonable limits. Nevertheless, operation is sometimes indispensable, and is not necessarily fatal, as is proved by Maurange's case. An operation in a case like this, offers less danger than too prolonged expectancy when there is suppuration of the appendix.

Radical Treatment of Varicocele.

The indications for the subcutaneous operation for the treatment of Varicocele as given by G. Frank Lydston, in The Alkaloidal Clinic, are as follows:

1. Where the patient absolutely refuses to consent to a cutting operation.

2. Where the time element is a matter of great importance.

3. Where the principles of modern aseptic surgical technique cannot be carried out in detail.

4. Where the surgeon has had absolutely no experience with the open operation and a more experienced operator is not available.

The Cause of Diffuse Peritonitis Complicating Appendicitis and its Prevention.

This important subject is very ably discussed in the Journal of the American Medical Association by Dr. A. J. Ochsner. He gives as a result of his clinical observations the following conclusions:

1. Peristaltic motion of the small intestines is the chief means of carrying the infection from the perforated or gangrenous appendix to the other portion of the peritoneum, changing a circumscribed into a general peritonitis.

2. This can be prevented by prohibiting the use of every kind of food and cathartics by mouth, and by employing gastric lavage in every case in which there are remnants of food in the stomach or in the intestines above the ileo-cecal valve, as indicated by the presence of nausea or vomiting or meteorism.

3. The patient can be supported by the use of concentrated predigested food administered as enemata not oftener than once in four hours and not in larger quantities than four ounces at a time.

4. This form of treatment, when instituted early, will change the most violent and dangerous form of acute perforative or gangrenous appendicitis into a comparatively mild and harmless form.

5. Cases of perforative or gangrenous appendicitis, with beginning general peritonitis, can usually be carried through the acute attack safely with this method.

6. In all cases of this class gastric lavage should be practiced in order to prevent the absorption of decomposing material from the alimentary canal.

7. In cases of doubtful diagnosis this form of treatment should always be employed.

8. This treatment will prevent a large proportion of the most troublesome complications and sequelæ of appendicitis, such as ventral hernia, fecal fistulæ, extensive adhesions, etc.

9. The patient should be permitted to recover fully from his acute attack before an operation is performed, except in cases encountered within the first thirty-six hours after the beginning of an attack or in case of the formation of a superficial circumscribed abscess.

10. It often requires but a small amount of any kind of food to change a harmless circumscribed into a dangerous diffuse peritonitis.

11. The treatment does not protect the patient against a subsequent attack.

12. It does not contraindicate the removal of a diseased appendix before the septic material has extended beyond this organ.

13. It is indicated in all intra-abdominal conditions in which it is desirable to prevent the distribution of septic material by means of peristaltic motion.

14. The laity should be taught to stop feeding and giving cathartics to patients suffering from intra-abdominal diseases.

Treatment of Puerperal Eclampsia.

R. P. Ranken, in the New York Lancet, is a great advocate of morphine judiciously given in puerperal eclampsia. It is quite free from disadvantages and has the following advantages:

1. It controls the convulsions by allaying the irritability of the cerebro-spinal system.

2. It prevents excess of waste products being thrown into the blood.

3. It does not weaken the patient.

4. It does not injure the child.

5. It has no effect on the kidney.

6. When the patient is under its influence labor often commences, and quickly terminates without causing more convulsions.

The Treatment of Tabes.

Dr. Collins, Indian Medical Record, summarises the treatment of tabes as follows:

1. The determination whether anti-syphilitic treatment shall be undertaken.

2. The utilization of electricity, hydrotherapy, massage, and counter-irritation.

3. The education of the ataxic members, the rehabilitation of purposeful movements.

4. The administration of the iodide of potassium in tonic doses, nitrate of silver, and restoratives.

5. The relief of individual symptoms, such as pain, crises, dereliction of the function of the bladder, ocular palsies, amaurosis, and trophic disturbances.

6. The adoption of a plan of treatment and carrying it through. This may be construed as psychical treatment if one so desires. However that may be, no one who has had experience in treating locomotor ataxia will be likely to deny its importance.

Two Useful Remedies.

Two of the most useful remedies used today is calomel and strychnine. In reference to their great utility C. E. Boynton, in the Wisconsin Medical Recorder, says:

CADOMEL.

If calomel does not act when it should, give an injection of glycerine or soap and water.

When first called to any fever, give from three to ten grains of calomel and follow with saline.

Ten grains of calomel every morning for three days in typhoid, is a good beginning particularly if it is desirable to make the bill light.

Always make it a rule when you prescribe calomel either to give it in large doses once a day or in small doses for a few hours only.

Do not prescribe say one grain of calomel every hour until the bowels move, for 20 grains may be given in this way and salvation result.

Small doses of calomel frequently repeated, say 1-10 grain every half hour until ten doses are given, usually succeed in promoting activity of the bowels.

When called to an infant with 105 deg. to 106 deg. temperature, in your prognosis give a ray of hope and in your treatment saying the child is two years old, give three or four grains of calomel.

It has been my practice never to give acids while giving calomel, but always to give $KHCO_3$ or $NaHCO_3$.

STRYCHNINE.

Calomel is the only drug that is more useful than strychnine.

Strychnine will enable you to make use, and good use, of veratrine and aconitine in fevers.

Strychnine, digitaline and glononin are the triple alliance to face up death when vitality runs low.

When the pulse lacks sufficient power then is the time to give 1-20 to 1-30 grain strychnine hypodermically.

It is not well to give full doses of strychnine as a routine treatment in fevers, but it should be used as indication demands.

To meet collapse we may give 1-20 grain of strychnine every one or three hours until 1-3 of a grain has been given within the 24 hours.

"The Porro-Caesarian Operation."

James H. Glass, in Medical News, gives the following indications for the porro operation as formulated by Howard A. Kelly of Baltimore. They are explicit and difficult of improvement:

(1) Where there is good reasons to anticipate sepsis, where for example, the patient is exhausted from protracted labor, and where manual or instrumental efforts at delivery have been made repeatedly or without due antiseptic precautions; (2) where there is cancer of the cervix uteri; (3) where the uterus contains myomatous tumors which block the pelvis or which cannot be safely removed by myomectomy; (4) where there is an extensive atresia of the vagina; (5) where there are bilateral ovarian tumors and no sound part of an ovary can be found and left; (6) when hemorrhage from the placental site is uncontrollable.

The Contra-Indications to the Operation of Litholapoxy.

The Contra-indications to the operation of Litholopoxy are given by Willy Meyer, it the Post Graduate as follows:

1. The presence of a stricture, which by moderate justifiable instrumentation cannot

be dilated sufficiently to admit the lithotrites and evacuating tubes of necessary caliber.

2. A degree of prostatic obstruction unsurmountable by the metal instruments unless undue force be used.

3. *a*. A highly infected, or septic bladder.

b. A cystitis that does not show signs of yielding to the preparatory treatment after three or four days' trial. Cases of excessive irritability of the prostatic urethra in particular and of the whole urethra in general, complicating more or less general cystitis, are included in thes category. In other words, the presence of a condition that demands drainage of the bladder.

4. Deep sacculations in the bladder or prominent trabeculæ between which a fragment may become lodged, thus escaping the current of the evacuating process and remaining to become the nucleus of a secondary concretion.

5. A calculus that is not freely movable within the bladder, or one at the bottom of a deep post-prostatic pouch or of a sacculation, beyond the reach of a searcher and therefore of a lithorite, the diagnosis having been made by the cystoscope.

6. A calculus so large as not to leave space enough for the necessary rotations of the lithotrite, or multiple calculi sufficient in size and number to similarly occupy all available space in the bladder.

7. A patient whose general condition demands the briefest operations that will fulfil the indications. From such a patient a calculus can be removed by a rapid suprapubic cystotomy performed under slight general anesthesia, or even under local anesthesia if it be necessary to avoid the risk of the former.

The use of the Suprarenal Capsule in Diseases of the Heart.

After using the suprarenal powder, Samuel Floershelm, in the New York Medical Journal, observed the following:

1. A weak and irregular-acting heart became stronger and more regular.

2. A dilated heart was contracted.

3. A diffused apex beat became localized.

4. A diffused, loud, and rough mitral regurgitant murmur became localized, and smoother, and lessened in intensity, while in some cases the murmur disappeared.

5. A murmur which, owing to the extreme weakness of the heart, could scarcely be heard, became more distinct, thus aiding in the diagnosis.

6. The normal cardiac sounds, when indistinct, became clearer and more easily distinguished.

7. In some cases a rapid pulse became less rapid; in other cases a slow pulse became faster.

8. Patients who were very weak, with organic heart disease, were improved.

9. No effect was observed in organic heart disease when the pulse was strong and regular.

Ten Years Experience With Tuberculosis.

The following facts are give by Chas. Denison, in the Journal of Tuberculosis. concerning the use of Koch's treatment on tuberculosis:

1. That hospital and very febrile cases, or those wholly unable to exercise, were undesirable patients for this form of treatment.

2. That the dosage and frequency of its administration recommended were too severe.

3. That any increase of intoxication of an already overburdened system, especially in cases with mixed infection, was harmful and hence any complication as la grippe, measles,, or tubercular pleurisy should for the time being interdic the treatment.

4. That no remedial effectc an be expected in tissues that are not alive and supplied with circulation; neither could any direct change of abscesses and cavities be expected, nor of mixed infections (as distinguished from pure tuberculosis.)

5. That the local effect in slightly affected tubercular lung areas was both remarkable extremely useful as a guide to dosage and prognosis. It was even diagnostic in some cases of affected spots not other wise detectable. This stethoscopically determined condition was probably due to some increased leucouytosis and stimulated ciculation in slightly affected and infiltrated regions, probably involving the bronchial glands and peri-bronchial tissues, so that the sound of the air movement in the tubes was changed. This change was described as a *puerile, broncho-vesicular and higher pitched sound* than existed before the test or treatment. It was then found that the subsiding or softening down of the harsh characteristics of this sound was also a guide for the continuance or pushing of the treatment.

Researches on Alcohol.

Binz, Indian Medical Record claims that alcohol is a stimulant to the respiratory centre.

In two papers published in 1899, he gives an account of experiments by himself and his assistants, which showed that the volume of air passing through the lungs

when alcohol has been taken was increased through a greater depth of respiration, or in sone cases where the breathing was shallower, through a quicker rate. This effect was often seen, even when sleep had been produced through the wine. A wine of rich bouquet had a more marked effect than alcohol combined with water, sugar, and lemon-juice. The experiments did not show any regular relation between the amount of alcohol taken and the effect on respiration. In some cases there was a fall instead of a rise of the respiratory curve. Binz does not say how the stimulus is exerted on the centre, but he indicates that further investigations are needed to show whether or not there is some paralysis of physiological inhibition. The amount of oxygen absorbed and of carbonic acid exhaled in those experiments is not stated; but others (by Zuntz, Geppert, etc.,) seem to indicate that there is no constant difference in the amounts of these gases when alcohol is taken. Hæmoglobin forms a close union with alcohol, and blood with alcohol in it does not part with its oxygen readily. Perhaps this may account for the necessity for increased respiratory effort—a necessity which is noted by Binz to be much greater in tired than rested individuals. The lowering of body temperature by alcohol has also been suggested as an explanation. It is clear that various points have to be settled before we can accept the stimulation of the exquisitely sensitive respiratory centre by alcohol as more than compensatory for other effects, possibly deleterous.

"Rheumatic Diathesis."

A. P. Stoner, writing in the Journal of the American Medical Association, draws the following conclusions in reference to the etiology and pathology of rheumatism:

1, that rheumatism is directly due to an infectious germ, and that the symptoms produced vary in accordance with the position and attenuation of these germs; 2, that these germs may at times complicate other disease conditions, as for instance scarlet fever, thereby causing rheumatic symptoms; 3, that the nidus of the germs may be located in the joints, which is usually the case, especially in adults, or more rarely in the heart, and quite frequently in the muscles; 4, that the uric and lactic acid found in these cases, are products, rather than the cause, of the disease, and that, of themselves, their presence is not pathognomonic of gout and rheumatism, in that they simply show the result of katabolism of the body cells, which condition may be brought on by numerous nutritional disorders; 5, that hereditary tendency, if carefully sought out, may be found in a large majority of cases; 6, that gout and rheumatism, although very dissimilar diseases, each possesses so many traits in common that we have been led to place them in the same family of diatheses. Both produce the same end-products of tissue metamorphosis, their nidi of infection have much the same location, and the pathologic conditions found therein are closely related. There is a tendency to cutaneous disorders in both diseases.

The Surgical Treatment of Gastric Ulcer.

F. B. Lund concludes a leading article, in the Boston Medical and Surgical Journal, concerning gastric ulcer as follows:

1. That in perforation immediate operation is absolutely indicated.

2. That in cases in which the symptoms fail to yield after medical treatment for a reasonable period, operation, consisting either of excision of the ulcer or gastro-enterostomy, should be performed, and this before the patient has become so exhausted as to render surgical intervention dangerous.

3. In hemorrhage, where slight, frequently repeated bleeding promises to produce grave anemia or exhaustion, similar early operation should be done.

4. Where a patient has suffered more than one copious hemorrhage, operation should be performed, and the extent and nature of the procedure should be decided upon according to the power of the patient to withstand operative manipulations, and the conditions found during the progress of the operation.

Some Observations on the Plague and Its Treatment with Lustig's Serum.

The following conclusions were deduced from an article in the Indian Medical Record by N. H. Choksy, Khan Bahadur:

1. That the serum exerted a distinctly favorable influence on the course of the plague.

2. That where it failed to avert death, it prolonged life, and temporarily ameliorated the condition of the patient.

3. That it did not exert much effect in those types of plague that are characterized by an extremely high mortality rate.

4. That its application therefore was mainly, though not exclusively, limited to the bubonic type of plague.

5. That there were limitations to its use in hospital practice, as about 50 per cent. of all admissions die within 48 hours, 20

per cent. recover naturally, and there remain about 30 per cent. that can be influenced by the serum treatment.

6. That its use would be more effective in private practice, as early cases would be treated, and that encouraging results, giving a recovery rate of 59.37 per cent. in 32 patients, have been obtained up to now.

7. That it exerts no deleterious influence on the patient, and could be injected into the healthy not only without any ill-effects, but with positive good, as it is capable of conferring *immediate but temporary immunity* against plague; this immunity may last from 10 to 15 days.

Some Diagnostic Details.

Wm. Edger Darnall in Indian Medic Record says:

A physician may so familiarise himself with individual physical types and combinations of temperament, when once his attention has been given to the matter, that at a glance he can tell from the color of the hair, the texture of the skin, the firmness of the flesh, appearance of mucous membranes, expression, bearing, general build, and similar indications, just what allowance should be made for sensitiveness and reactionary power. Such considerations, no doubt, influence every practicing physician more or less, perhaps unconsciously, in many cases, in making up his mind with regard to the general condition of his patient.

Stone in the Bladder.

The question whether to cut or crush in cases of stone in the bladder is no new one. Stuart McGuire, in Richmond Journal of Practice, says that Lithority is admitted by its advocates to be contraindicated in the following conditions:

1st. When the stone is hard and cannot be crushed by instruments capable of being used through the urethra.

2d. When the stone is large and cannot be grasped by reasonable separation of the jaws of the lithotrite.

3d. When the stone is brittle and the resulting fragments sharp and irregular.

4th. When the stone is fixed or encysted.

5th. When the stone has a foreign body as a nucleus which cannot be crushed and removed.

6th. When the prostate is enlarged, or the bladder contracted, making it difficult to seize the stone.

7th. When there is a tight or impassible urethral stricture, requiring a long operation to relieve.

8th. When there is ankylosis of the hip joint in a position embarrassing the movements of the lithotrite.

9th. When the general condition of the patient is such as to make shock dangerous and rapid work necessary.

The Pathology and Bacteriology of Uretero-Intestinal Anastomosis.

Concerning this subject F. Robert Zeit, in the New York Medical Journal, concludes a lengthy article as follows:

1. Ureteral implantation into the rectum is always followed by ascending infection. The resulting pyelonephritis is caused by the *Bacillus coli communis*.

2. The primary mortality is very large, 84 per cent., no matter which operation is done.

3. Of 120 dogs operated upon, 90 per cent. died of peritonitis due to leakage of urine or general sepsis and pyelonephritis during the first ten days.

4. Dogs living a longer time died of pyelonephritis, pyelonephrosis, and pyæmia.

5. Dogs which had fully recovered from the operation and the resulting pyelonephritis, and were, to all appearances, in perfect health and vigor again, all had granular contracted kidneys, due to induration and cicatrization of diseased areas. The rectum acts as a fair substitute for the bladder in such cases.

6. Dogs which had fully recovered after unilateral implantation were living by the other kidney. The kidney of the side operated on was atrophic and granular, the result of an early pyelonephritis. The functionally active kidney was of two to eight times the size of the atrophic one.

7. A review of the literature on ureterointestinal anastomosis in man shows that no better results can be expected in man than in animal experiments.

8. The ureters are frequently dilated, but show very little or no disease, no matter how extensive a pyelitis or pyelonephritis is present.

9. The bladder is always infected by way of the urethra, whether it is emptied at the time of operation or not. A purulent cystitis was found in every case, caused by *Staphylococcus albus* and *Bacillus coli communis*.

10. Artificial immunity to infection by the so-called colon group of bacteria is the only hope of making uretro-intestinal anastomosis a feasible operation.

Recent Progress in Otology.

There is quite a lengthy and instructive article in the Boston Medical and Surgical Journal by Philip Hammond on recent

progress of otology. Earache in children is quite a common complaint and often deep and grave trouble results from such affections, and too these troubles are often treated lightly, far too much so. Halstead, in discussing the significance of earache in children finds that:

1. Earache in children is generally caused by acute inflammation of the middle ear, suppurative or catarrhal.

2. Infants and young children may have suppuration in the middle ear without giving satisfactory evidence of pain or without rupture of the drum.

3. In the absence of other known cause for pain, from which a child is evidently suffering, the first cause to be thought of should be acute otitis media, and this calls for an examination of the drum membrane.

4. It has been shown by examination of the middle ear during life and post mortem that purulent otitis media is nearly always present in acute infectious diseases of the gastro-intestinal and respiratory tracts in young children, especially in gastro-enteritis and bronchopneumonia, to which diseases it probably stands in a causative relation.

5. The cause of death in many acute and chronic infectious diseases, in meningitis and in the exanthemata, is the result of unrecognized and untreated abscess of the middle ear.

6. Repeated earaches in children are ordinarily but a sign of acute exacerbations of a chronic otitis media resulting from adenoids.

7. In adult life, so-called catarrhal or progressive deafness is often but a final stage of otitis media, which had its beginning in early childhood, when it was due to adenoids, and practically curable.

Leutert-Konigsberg, in a series of bacteriological examinations in cases of mastoid infection following acute otitis media, found pathogenic organisms in the following order of frequency: Streptococcus, pneumococcus, staphylococcus, pyogenes albus and tubercle bacillus. In sinus thrombosis the streptococcus was usually found alone.

Progress in the Treatment of Typhoid Fever.

In reference to nourishment in this fever H, P. Cook, in the Medical Times, says we should be guided by the following indications:

1. It should be acceptable to the taste, and should satisfy the appetite.

2. It should be retained by the stomach, and should not induce nausea or vomiting.

3. It should be digestible without difficulty, and completely.

4. It should leave no residue to mechanically injure the diseased bowel, or to furnish a pabulum for micro-organisms.

5. It should be so constituted as to meet the special demands arising from perverted and excessive tissue changes; it should supply fuel to replace tissue burnt, and material for tissue upbuilding.

It is admitted that the last named quality is of first consideration—the food must be made to sustain life and maintain structure, or, fulfilling all else, it would be valueless.

The Prevention of Post-Operative Adhesions of the Peritoneum.

In reference to the above subject, in an interesting and able article in the American Journal of Obstetrics, George Gray Ward comes to the following conclusions:

1. That peritoneal adhesions after operation result from several causes.

2. That, therefore, we cannot depend upon any one preventive method, but, recognizing their multiple etiology, we must employ all the details of operative technique that are necessary to offset the various causes.

3. That this necessitates a technical skill that can only be attained by a long apprenticeship and a thorough training in abdominal surgery.

Psychotherapeutics.

Philo D. Patterson, in Medical Age, says bigotry, the bastard offspring of ignorance and prejudice, has always waged a warfare against the advancement of science. It has always obstructed human progress, and is now a standing menace to all future growth in theology, sociology, and liberal thought. It turns a deaf ear to evidence; it stifles reason; and it condemns without hearing. "None are so blind as those who will not see." "Intolerance is generally based upon an incapacity to comprehend the arguments of our opponents." Our profession, especially the leaders of medical thought, in dealing with the issues of health and life, should be so controlled by the "spirit of truth" that they would hear evidence with judicial candor, consider fact and phenomena with minds open to conviction, and accept truth whenever and wherever found.

Progress of Medicine in the United States During the Nineteenth Century.

It is interesting to note the progress made in medicine during the past hundred years. In those days Philadelphia had the best of everything. Philadelphia was the undisputed centre of medical education in

America. Charles W. Dulles gives an excellent description of a progress made during the nineteenth century in The Philadelphia Medical Journal. At the close of his article he says:

Probably the greatest single achievement of the nineteenth century was the application to surgery of what are called general anesthetics. Though for centuries surgeons had endeavored to lessen the pain of operations by the use of various drugs, some of which, we are told, were supposed to act by means of their odor, it was not until 1846 that what is now known as general anesthesia was properly practiced. In 1799 Sir Humphrey Davy inhaled nitrous oxide to quiet the pain of cutting a wisdom tooth; but it remained for an American dentist, Horace Wells, in 1844, to use the gas systematically; while in 1846 William Morton—who had learned the use of nitrous oxide gas from Wells—at the suggestion of Dr. Charles T. Jackson, first used ether for tooth-extraction and soon after succeeded in establishing its claims as a general anesthetic. Four years earlier—that is in 1842, an unpretending country practitioner, Dr. Crawford Long, of Athens, Georgia, who had observed the effect of an accidental total anesthesia, produced by giving what was considered an overdose of ether by inhalation to a negro, employed this agent in the removal of a tumor, and afterwards several times, with entire success. But as he did not publish his operations at the time, it was not known that he had done them until the success of ether led to discussions as to priority in its use. It is clear that, whatever part others may have had in the development of this idea, it was William Morton to whom more than to any one else the world is indebted for it. He had the courage to propose to test the method in public; and on October 16, 1846, the first public operation under ether was done in the operating room of the Massachusetts General Hospital by Dr. John Collins Warren. The scene on this occasion was a most interesting one. The patient, surrounded by some of the most distinguished surgeons of Boston and New York, was instructed by Morton to breathe deep and long and to have confidence in him. He soon became completely unconscious, and Morton, turning to Dr. Warren, said: "Your patient is ready." At the first incision there was no sign of pain; a pin could have been heard to fall, so intense was the silence. Dr. Warren quickly completed the operation, removing the tumor and placing the stitches. Still there was no sign of pain, the patient slumbering as peacefully as a child. Dr. Warren turned slowly from the recumbent figure, and scanning the eager faces about him said: "Gentlemen, *this* is no humbug." Thus was successfully inaugurated a practice which revolutionized surgery and has saved immeasurable suffering and countless lives. This glorious achievement belongs entirely to America. Its description may fitly serve as a conclusion to this brief summary of what was then accomplished in the noble work of those devoted to the art of healing, of whom Whittier says:

"So stood of old the holy Christ
Amidst the suffering throng;
With whom his lightest touch sufficed
To make the weakest strong.

That healing gift he lends to them
Who use it in his name;
The power that filled his garment's hem
Is evermore the same.

Pus in the Female Pelvis.

Fortunate is the physician who can early diagnosticate any lesion and its points of progress in the pelvis. Edwin Ricketts, in the New York Lancet, concludes an article on this subject as follows:

1. An abdominal section during pregnancy, for pus in the pelvis, is always followed by well-pronounced shock.

2. In vaginal hysterectomy, vaginal or crest drainage, following abortion or delivery at full term, shock is not so pronounced.

3. With puerperal pus in the pelvis, with vaginal or crest "pointing," puncture should be considered, and an abdominal section as a secondary procedure, considered later on.

4. With an abdomen opened and a quantity of free pus found, abdomino-vaginal drainage offers the best results.

5. Extra-uterine pregnancy is always best dealt with through the abdominal incision.

Pernicious Anemia.

Concerning this subject, Hunter, in the Interstate Medical Journal, has recently studied seven cases of pernicious anemia and draws the following conclusions from his observations:

1. "Pernicious anemia is a special form of chronic blood-poisoning, a toxemia."

2. "It is the result of a special infection of the digestive tract, especially of the mouth and stomach, and probably, although to a less degree, of the intestines."

3. "The chief source of infection is through the mouth, from long-continued and neglected cario-necrotic conditions of

the teeth, and sometimes possibly from stomatitis arising from other causes."

4. "The usual effect of this infection is a chronic infective catarrh of the mouth and stomach, which may in time lead to deeper-seated changes, viz., ulcers of the mouth and tongue, and chronic gastritis with atrophy of the gastric glands."

5. "Evidences of the infectivity of the organisms of dental decay are overwhelming, and in suitable cases the infective nature of the resulting catarrh of the stomach can also be demonstrated."

6. "Infection is chiefly streptococcal, and possibly derives its special characters from being of a mixed character."

7. "Such infection the more readily occurs if the stomach or intestines be already, from any cause, the seat of disease."

8. "The gastric and intestinal irritation (sickness, retching, vomiting, looseness of the bowels and diarrhœa) so often noticed, and which I find to be even more common than is stated (being recorded in close on to eighty per cent. of cases), is the local effect of this infective catarrh, while the excessive destruction of blood taking place in the portal area, is the result of the action of the poisons in the blood."

9. "The fever so commonly met with is not an accidental occurrence, the effect of weakness, but is a feature of the infective process itself, and its variations correspond to the variations in the activity of that process."

10. "Such variations are common from week to week, sometimes from day to day, in the progress of the disease, even when it is running a fairly progressive course."

11. "In additon, however, the course of the disease toward the fatal termination is often marked by one, sometimes two periods of marked improvement lasting, it may be, many months or a year or more, followed by relapses. This character of the disease I have come to regard as the result of a relative immunity, unfortunately only temporary in its nature, conferred by the disease itself to an immunity accelerated and greatly strengthened for a time by a suitable medicinal treatment, notably by the administration of arsenic."

12. "The above conclusions suggest certain new considerations in regard to treatment, of which the chief are, viz.: (1st) minute attention to the hygiene of the mouth, and especially of the teeth, with the immediate removal of every source of infection there; (2nd) stricter antiseptic treatment of the stomach and intestines; and (3rd) antitoxic serum treatment, with the view of antagonizing within the blood itself the poisons absorbed into it."

The Practice of Medicine as a Source of Income.

Physicians have always been careless and negligent about collecting their accounts, and as a natural consequence they accumulate very little wealth. D. A. R. Steele, in the Medical Age, gives some good advice when he says:

Always have a straightforward and accurate understanding with your patients as to the value you place upon your services. Never tell a patient, when he offers to pay a bill, "Oh! never mind, to-morrow will do just as well." Now is the accepted time; to-morrow may never come. Gratitude is short-lived. Our charges for professional services should be somewhat proportionate to the ability of the patient to pay, and to the responsibility involved in the services rendered in a given case. Keep a neat, legible set of books; keep your accounts posted up each week; present your bills monthly, and if they are not paid promptly, give them to an honest collector. Keep everything up in a businesslike way, and your patrons will esteem you more highly. By being businesslike in your dealings with patients, you will make your profession honored; you will make the practice of medicine a source of income; and you will derive the satisfaction, not only of the scientific pursuit of knowledge in the practice of our art, the keen enjoyment of original research, but the added satisfaction of deriving a living income from your efforts.

Operations for the Relief of Senile Hypertrophy of the Prostate Gland.

Orville Horwitz refers to his results of one hundred and sixty-one operations for the relief of Senile Hypertrophy of the Prostate Gland. From results obtained he records the conclusions here set forth:

1. Success following the Bottini operation depends on having perfect instruments; a good battery; the necessary skill, and the employment of a proper technique.

2. In suitable cases the Bottini is the safest and best radical operation thus far advised for the relief of prostatic hypertrophy.

3. It is often very efficacious in advanced cases of obstruction as a palliative measure, rendering catheterism easy and painless, relieving spasm; lessening the tendency to constipation, and improving the general health.

4. It is of especial service in the beginning of obstructive symptoms due to hypertrophy of the prostate gland, and may be regarded as a means of preventing catheter life.

5. It is indicated in all forms of hypertrophy except where there is an enormous overgrowth of the three lobes associated with tumor formation giving rise to a pouch, both above and below the prostate gland.

6. Where the bladder is hopelessly damaged, together with a general atheromatous condition of the blood vessels, associated with polyuria, results are negative.

7. Pyelitis is not a contra-indication to a resort to the operation.

8. The character of the prostatic growth has no bearing on the results of the operation.

The ligation of the internal iliac arteries for the relief of hypertrophy of the prostate gland, first recommended by Bier, has been tried by several surgeons with very unfavorable results. The benefit derived from the operation is slight, and the mortality higher than that following prostatectomy. Thus far, the results derived from angioneurectomy. Thus far, the results derived from angioneurectomy have been negative. I have frequently witnessed the operation of perineal prostatectomy when performed by others, and have on various occasions resorted to it, but I have found that nothing was gained beyond the temporary improvement that might naturally be expected to follow rest and drainage. These methods have, therefore, not been employed in the cases referred to in this paper.

Operation for the Relief of Hypertrophy of the Prostate Gland.

Much has been written on this subject, giving rise to a vast amount of discussion as to the merits of the different operative procedures. Orville Horwitz, writing in the Philadelphia Medical Journal, details the following deductions:

1. In selected cases, bilateral castration will always hold a place in genitro-urinary surgery as a means of removing the obstruction caused by prostatic hypertrophy.

2. The operation is indicated in men of advanced years, whose sexual powers are lost, the overgrowth of the prostate being glandular in character, or who have reached that period of life where the passage of a sound is impracticable.

3. The primary effect of castration on the glandular prostatic hypertrophy is first to relieve congestion, and secondarily to cause atrophy.

4. When the prostatic enlargement is fibrous in character no benefit is derived from the operation and its employment under these circumstances is not to be recommended.

5. Orchidectomy in very old subjects with extensive disease of the bladder and kidney is attended by a large mortality, and is a very serious operation.

The So-Called Traumatic Neurosis.

An immense amount has been written upon this topic and the opinions vary greatly. Harold N. Moyer, in The American Medicine, sums up an able paper and suggests the following points for discussion:

That concussion neurosis in all its various appellations, is an unfortunate and misleading term; that clearer understanding of functional nervous troubles renders such a term unnecessary; that pain and tenderness of the spine is rarely an evidence of change in the cord, but is usually due to fatigue of the spinal muscles, or sprains and concussions of the column; that most of the symptoms of spinal concussion, as the term is commonly used, are cerebral in origin, and that a correct diagnosis and prognosis may usually be reached by analyzing all such cases after the same manner that we do functional nervous troubles having their origin in non-traumatic causes.

The Biceps Tendon Jerk in Locomotor Ataxia.

This subject has been discussed a great deal in recent literature. It is a very important subject and demands our careful attention and consideration. Moses Behrend, in The Philadelphia Medical Journal, gives the following conclusions from his observations:

1. That the ataxia in the arms is, as a rule, more marked when the biceps tendon jerk is absent.

2. That the ataxia of the arms is usually marked when the same is found in the legs. In these the biceps tendon jerk is absent.

3. That in the presence of the biceps tendon jerk with slight ataxia in the legs is invariably well marked.

4. That sensation is usually normal in those cases with normal biceps tendon jerk.

5. That the sensory losses are usually found when the biceps tendon jerk is absent.

6. That arthropathies are only found in the advanced cases.

7. That astereognosis is only present in the markedly ataxic.

8. That the loss of the sense of position is almost constant in the advanced cases of tabes.

9. That the shooting pains in the arms do not bear any relation to the degree of ataxia.

10. That the marked ataxics seldom show the loss of weight sense.

11. That the intensity of the symptoms are not dependent on the duration of the case, but rather upon the extent of the sclerotic process. For example, I saw one of my patients who has had tabes for the past 22 years sitting on a railing with the feet resting on a bench and balancing himself well. Another striking point is the selective power of the pathological lesions. We find that the biceps tendon jerks are present in three patients on one side and absent in the other. We can explain this by assuming that the degeneration has limited itself to one side of the cord. In those cases in which the biceps tendon jerks are absent, the sclerosis probably extended to the cervical region, but it is not to be forgotten that this reflex may be absent in normal individuals.

Oral Sepsis.

George Herschell says, in the International Medical Magazine, that the treatment of a septic mouth consists of the following steps:

(1) All stumps must have the septic pulps removed and be properly filled and capped; or, of course, if too far gone, extracted. (2) All spicules of tartar are removed from the necks of the teeth under the edges of the gums. (3) The pus-pockets are then syringed out with hydrozone or some other reliable preparation of hydrogen dioxid. (4) A saturated solution of nitrate of silver or protargol or argentamin or equivalent preparation is then to be applied upon small points of wood to the interior of the pus-pockets. It is best to take one tooth at a time and make a complete application to this before passing to the next one. In sensitive mouths it may be impossible to treat more than one tooth at a sitting. (5) An antiseptic and stimulating mouth wash is prescribed to the patient. A very good one consists of a one in ten solution of listerine or euthymol. (6) A proper tooth-powder especially adapted to the state of the patient's mouth should be given.

The Financial Relation of the Medical Profession to the People and the Public.

In an able article in the Journal upon the above subjec J. J. Conner says that the members of the medical profession have been imposed on, both by the people at large and by the public authorities, and are not receivinn the just remuneration for services or the due respect from the public that they deserve. But the members themselves are almost wholly to blame for this state of affairs. If we had more of the spirit of Dnmas' famous guardsmen we would be far better off, i. e., "One for all and all for one." We should make ourselves felt as a united body, demanding our rights as one man in the voice of the whole profession, when we ask for anything of our lawmakers or of others. If we would make ourselves heard by united effort we could have almost anything we might ask for that is reasonable. Our inharmonious condition is due to lack of organization, and in consequence the profession does not receive that respect which it would if its members were well organized into an association controlled for the benefit of the whole; and in working for the profession at large each individual member would be helped financially and elevated to a higher plane of usefulness. As to our present condition, it is very little better now than it was many years ago, but who is to blame for it but ourselves? Every walk of life but that of medicine is represented in the names recently chosen for the Hall of Fame. Then let us consider this omission of the names of the great benefactors of the whole human race, like Morton, the discoverer of anesthesia, and McDowell, the great pioneer of abdominal surgery, and of Sims, the immortal gynecologist, ask ourselves the reason for it. The answer is: Because we are not united in a harmonious body, and so accomplish little or nothing, while we continue to wonder why we are not recognized according to worth as other men progress.

The Value of Calcium Carbid in the Treatment of Inoperable Carcinoma of the Uterus.

The treatment of carcinoma by calcium carbid dates from 1896. It was first brought to notice in America by the late Dr. J. H. Etheridge, of Chicago. There appears in the Journal of the American Medical Association an article by I. C. Chase in reference to this treatment in which he gives the following resume of important conclusions:

1. The mass of the literature on this subject is misleading.

2. The originators of the treatment were ignorant of the real action of calcium carbid, and had insufficient clinical experience to pass judgment on its value.

3. Acetylene has no effect on protoplasm sufficient to support a theory of any specific annihilative action on carcinomatous cells.

4. Acetylene has no escharotic effect.

5. Acetylene has no bactericidal action upon pathogenic bacteria or the bacteria of putrefaction.

6. The principal action of calcium carbid results from liberated quicklime.

7. Lime is not a rational caustic to select, if one is desired, because of its superficial action, the character of the necrosis and tendency to promote hemorrhage. The metalic salts are more styptic, and their action may be better graduated by proper selection.

8. The amount of heat evolved may be sufficient to slightly cauterize the tissues. In most cases it has slight therapeutic effect save counteracting the tendency to hemorrhage and promoting contraction.

9. The heat of the actual cautery promises better results because of the firmer cicatrices, resisting carcinomatous invasion and more complete contraction of the wound.

10. Calcium carbid is open to the same dangers as other caustics when improperly or too zealously applied; those of producing its corrosive action in the wrong place, fistulæ, perforation and fatal peritonitis or occlusion of the ureters.

11. The treatment does not reduce odor or hemorrhage nor give more comfort to the patients than other rational lines of treatment.

12. The claims of advocates have not been realized in experience. There is no evidence in theory or practice warranting the conclusion that calcium carbid could ever cure a case of really inoperable cancer of the uterus.

13. The facts regarding the subject should be more widely disseminated to expurgate medical literature and to avoid false expectations and fatal delays in operable cases.

Wheeling for Health and not for Record.

Indulged in moderation, there is no form of exercise so beneficial, so pleasant, and so healthful to both mind and body as a good mount on a good wheel.

F. S. Grant, in Medical Examiner and Practitioner, thinks if the following suggestions were faithfully observed, the interest in cycling would again be revived and would come to stay:

1. Do not ride a wheel before getting a medical opinion as to your physical condition and fitness.

2. Learn to ride properly and to thoroughly control your wheel before taking to the road.

3. See that your wheel is equipped with some form of reliable brake. Abandon high gears.

4. Learn to use, not abuse this wonderful invention and graceful means of locomotion.

5. Never exceed your strength—ride for health and recreation, never for records.

6. Ride regularly, time and weather permitting, regardless of seasons.

7. Change your clothing immediately after coming from a ride. Take a tepid bath with ammonia added and sponge off with cool water and good rub. Put on dry underwear.

8. Finally, be considerate and thoughtful of man and beast, women and children and fellow-wheelers when out on the road. Strictly follow "the rules of the road," and compel others to do the same.

Traumatic Hysteria and Neurasthenia.

The nervous phenomena resulting after accidents and after emotional shocks have been carefully studied in the last fifteen years. Edward E. Meyer, in the Pennsylvania Medical Journal, says a correct examination is indispensable to a proper diagnosis:

1. As has been mentioned before, a physician can only satisfactorily enter upon an examination of such cases when perfectly familiar with the significance of all nervous phenomena and the methods of examination.

2. An examination should be made as soon after the inquiry as possible.

3. If a probable medico-legal case, the physician should convince the patient that he has no interest in the outcome of any suit that may arise, and that his examination is for medical purposes only.

4. A subjective history of or an apparent severe pain should not deter the physician from making a thorough examination.

5. The first examination should be thorough, but the patient must be repeatedly observed in order to detect possible variations in symptoms. A shifting of symptoms, it must be remembered, can occur in hysteria as well as in simulation.

6. If possible, the patient should be observed before the examination, without the identity of the physician being known, or without the patient being aware of any observation. This will often enable the physician to detect differences in the execution of movements, eating, mental phases, etc.

7. The examination must be conducted with a totally unprejudiced mind.

8. Organic disease must be carefully excluded before the thought of a functional disorder arises. This is only conclusively possible by frequent and careful examinations. In recent years, for instance, much attention has been given to the occurrence of multiple sclerosis after traumata. As hysteria and multiple sclerosis may be

present conjointly, and as multiple sclerosis often resembles (when optic atrophy is absent) hysteria, a diagnosis may be very difficult. Paralysis agitans also often follows accidents, and may be confused with traumatic hysteria as the tremor, gait and posture may be very similar.

Ureteral Implantation into the Bowels for Diversion of the Urine.

Jacob Frank after writing about and discussing this subject in the Journal American Medical Association, concludes that:

1, the technique is all that can be wished for; 2, bilateral implantation into the rectum simultaneously is primarialy and remotely an extremely dangerous procedure, and can have no favorite place in human surgery; 3, while no single permenent implantation of the ureter into the rectum has demonstrated an abscence of inflammatory reaction on the part of the kidneys, nevertheless I am of the opinion that it must be regarded as justifiable where other means fail, and has a limited place in pelvic surgery; 4, while stricture did not take place, we can not say with confidence that scar contraction at the opening into rectum will not in months or years produce one; 5, that the rectum will tolerate the presence of urine can not be doubted by any one, and has been proved by many experimenters.

Variability of the Tubercle Bacillus.

Carl Ramus, in the Journal of the American Medical Association, speaking of the variability of the tubercle bacillus draws the following conclusions:

1. Tubercle bacilli are not alwas so easy to demonstrate as is commonly believed, even though present in large numbers.

2. The fuchsin solutions, like those of other dyes, can not at all time be absolutely depended upon.

3. Tubercle bacilli from different patients, and from the same patient at different times, will not invariably stain by one method.

4. The bacilli exhibiting these varying staining properties are genuine tubercle bacilli, and not other species of acid-resisting germs.

5. The stainining variations probably depended on physical and chemical changes in the bacterial substance, instituted either by antitoxic action or by the products of associated organisms, or by a combination of both.

6. In the absence of demonstrated tubercle bacilli, where physical signs of tuberculosis exist, a prompt diagnosis of that disease should be confidently made in the interest of the patient, and no valuable time be lost in waiting for typical bacilli to appear.

Tuberculosis of Fascia.

In reference to this subject, J. Clark Stewart in the Journal of the American Medical Association says:

1. Tuberculosis of the fascia occurs with sufficient frequency to entitle it to more attention than it has received in the past. 2. It occurs in two well-marked forms. 3. The recognition of these forms is essential to its proper surgical treatment. 4. Fibrous tissue associated with, and resulting from tubercular infection is to be viewed as tubercular tissue, and treated accordingly. 5. Such fibrous tissue may in some cases need the test of animal inoculation to absolutely prove its tubercular character.

Veld Sores.

J. G. Berne, in the British Medical Journal, says after fifteen months campaigning with the Royal Field Artillery, he has arrived at the following conclusions respecting this interesting skin disease:

1. Veld sores are not more common in the mounted branches of the service than in the infantry. On the whole, I consider that for the number of men under my medical charge (three field batteries and an ammunition column) veld sores were not a common complaint on the daily sick reports.

2. Veld sores are much commoner in the winter months (June—October).

3. No difference is to be observed in the number of cases, whether in the Orange Free State or Transvaal.

4. The veld sore, in most cases, is characterised by a purulent discharge. In one instance (an officer) this was very marked. In a small number the sores were very hard, with irregular edges, and no discharge was present. In all cases the course was chronic.

5. The lesion starts in two ways: (*a*) a blister, which apparently rises *de novo*, this bursts, the tissues around become devitalised, and an ulcer starts; (*b*) by direct injury, cut on finger, opening a "bully" beef tin, etc. This is the most frequent history of a case.

6. The sores are alwas chronic in their course, and I know of no specific treatment; the ordinary treatment for ulcers must be followed.

Probably the harsh dry winds which blow across the veld in the winter months, and the fact that opportunities of washing on

the march are few, may tend to prevent the sores from healing. I am told that in standing camps veld sores are quite rare.

If these points are true dirt must be an important factor in the disease, and a bacillus like the B. tetani may be the cause.

Some veterinary officers think that the horse tick, which was certainly very prevalent among the horses of the batteries, may be responsible; but, as I have already pointed out that veld sores are quite as common among the infantry as among the mounted branches, this point may be disregarded.

Three Well Known Drugs.

Quinin, Iodine and Sodium Sulphate are probably three of the best known drugs, they have been used for many years and are safe and reliable. Many new drugs have been introduced since the beginning of their use, but in times of need and while great responsibility rest, we usually return to the tested and tried old remedies.

The Leading Editorials of the Month.

The Value of Professional Service.

According to the New York Lancet:

There seems to be much vagueness and uncertainty in the public mind regarding the value of the services of the physician and surgeon. If we were to analyze the causes which lead up to this, they would doubtless be found in the fact that the public have an inadequate appreciation of such service.

So many persons seem to take the view that the services a of physician have so low a value that those offering to treat the sick enter the market like a tradesman, entering into competition with one another, and that the one willing to work for the least pay claims the bulk of patronage.

Another estimate placed upon the services of the doctor is measured by the disinclination and too often the distinct determination not to pay him, or, by trade-union methods, to force his discounts to the lowest possible amount. In this matter the profession are much at fault. So many practitioners seem to forget that their patrons never place a higher value upon their service than they do.

This inclination, so often present, to discount the value of one's own services is easily seized upon by the unscrupulous as a pretext to escape whooly, or in part, just and proper remuneration for work rendered. As a result, professional dignity suffers serious loss. Another factor is the wide-spread tendency of people to prescribe for themselves and one another. The physician having intrusted to his patient a knowledge of the remedial medicine employed in a given case, this patient, if it chance to act well, prescribe the same for himself and friends under conditions which he supposes to be identical. This engenders a dispotion of sick persons to accept the suggestion of any and every layman. Where success does not follow this indiscriminate dosing and a physician is sent for, the patient declares he has "taken everything," but it has done no good. Now it is not to be presumed that this is a universal practice. The proper appreciation of professional services and just payment for the same is believed to be the rule of most intelligent and fair-minded people. The cure of the evil described will be hastened and encouraged when practitiorners insist on full payment of bills by those whose finances warrant it. Added to this should be such a conscientious discharge of duty by the attendant as will appeal to all right-thinking people that fairness and justice are the attributes of the physician's character. Those physicians who by practice and precept inculcate a lower standard of action are unworthy a place in a noble profession.

The question why one physician can and does charge and receive higher fees than another is found in the public appreciation that his skill and ability warrant it. With this as a test for professional attainment, it is not difficult for the professional man to formulate a safe and wise rule for his daily conduct.

The Selection of Summer Clothing.

The June 15th number of American Medicine contains a valuable editorial on the selection of summer clothing:

The selection of summer clothing is a matter of considerable importance not only from the influence it may have in comfort, but also in promoting health. Yet this is a matter to which most people give comparatively little attention, and the question of style and appearance is certainly more considered than the effect on health. From the hygienic standpoint we are concerned with the questions of what form and quality of clothing will maintain the proper body-temperature, protect from changes of temperature and absorb the sweat with the excretory products contained in it. In both summer and winter, as a general rule, too much, too heavy, and irrational clothing is worn by most people. This keeps the body overwarm, and promotes free sweating,

thus the skin is most of the time kept covered with moisture, in a condition in which it reacts most readily to changes of temperature and is likely to become suddenly chilled. The frequently summer coughs and colds, most of them, arise in this way. Besides weight of clothing, the ventilation, if we may use that term in this sense, is important. Goods of loose texture, loosely fitting and without constricting collars or bands allow free circulation of air and escape of prespiration vapor. Clothing which is not properly ventilated retains a layer of steam-like perspiration which gives a feeling of oppression. The sweater is an example of a properly ventilated garment, and every athlete knows how warm and comfortable a sweater is. Its loose mesh permits of free escape of perspiration, the skin dries rapidly, but without becoming cold. Very little clothing is needed to maintain the bodily temperatere in summer, but it is necessary to protect against sudden changes in our changeable climate. Wool, cotton, linen and silk each have their enthusiastic advocates. Experience has very certainly shown that woolen garments are better adapted to protect those whose occupations subject them to very sudden and considerable changes of temperature, especially if accompanied with much exertion. But it is unfortunate that practically no light loose mesh woolen under-garments are to be had that have any durability; and thus for persons engaged in sedentary occupations the lighter cotton and linen mesh are better adapted. For both cleanliness and health very frequent changes of underwear are needed, thus keeping the skin in the very best condition to eliminate as much waste matter as possible, and this is fully as important as the material of the garment worn.

Less clothing, looser mesh garments, fewer stiff collars and constricting bands are needed reforms in summer clothing for our hot cities. If sensible people will demand such clothing, the demand will not long remain unsupplied and what sensible people wear soon becomes, to a certain degree at least the fashion.

The Relation of Physician and Surgeon.

In the American Journal of the Medical Sciences we find this editoral:

The fact that mutual benefit is derived from consultations between physician and surgeon, in the case of many affections that were formerly considered purely medical, has been recently emphasized. In all medical affections in which surgical intervention may become imperative to save life, as typhoid fever, gastric ulcer, cholelithiasis, exophthalmic goiter, and numerous others, the physician must either associate with himself a progressive surgeon or thoroughly acquaint himself with the pathologic manifestations that furnish an indication for operative procedure and promptly invoke the aid of the surgeon when occasion demands. Conversely, practical knowledge of the symptomatic indications of this class of diseases, as well as the more refined laboratory methods of investigating them, is of incalculable value to the surgeon. He must at all events be able to interpret the results of laboratory research for the purpose of arriving at an accurate diagnosis. In his Oration on surgery, before the recent meeting of the American Medical Association, Dr. John A. Wyeth directed forcible attention to the common error of relying exclusively on the subjective and objective signs, on the one hand, and the importance of calling into requisition those invaluable aids to diagnosis that are furnished by bacteriology, the demostrations of hematology and a careful microsopic and chemical examination of the sputum, gastric juice, and urine on the other. The address of Dr. J. M. Anders, Chairman of the Section on Practice of Medicine, at the same meeting, also contains practical and timely suggestions along the same lines. He emphasized the importance of a closer, truer union between the physician and surgeon, in the operating theater, the clinical amphitheater and at the beside, as well as the advantages of joint sessions between the medical and surgical sections for the discussion of that growing class of diseases that may present both medical and surgical aspects. Neither so-called medical nor surgical affections are distinct entities, and hence a more liberal joint cultivation of the ever-growing field that is of mutual interest and concern to physicians and surgeons would be an important step in the advancement of the welfare of mankind. Moreover, a more intimate association would tend to lessen the aggressiveness of the surgeon and, what is perhaps even more important and desirable, lessen to an equal extent the conservatism of the physician. Especially when viewed from the standpoint of treatment many affections demand at the present day surgical, coupled whith physical, physiologic and therapeutic measures. In short, they require the combined services of the physician and surgeon for their successful management. This new condition of things has sprung from the invasion of the various viscera of the body by the surgeon as the result of improved methods and advancements in his art, and the ultimate benefits as compared with the pure medical treatment of the former days are obvious.

Self-Performed Caesarean Section.

A remarkable case of Caesarean Section is reported in an editorial in the Philadelphia Medical Journal, which indicates the uselessness of the modern methods of antisepsis:

Probably nothing better shows the remarkable immunity enjoyed by the peritoneum than the interesting cases of self-performed Cæsarean section, that from time to time are reported in the current literature. Besides manifesting an astounding degree of stoicism, these patients seem to have the happy faculty of evading the disastrous consequences of their temerity, and that notwithstanding the most inauspicious circumstances under which the act is consummated. Filth to them is apparently innocuous, and bacilli have no terrors.

A remarkable fact associated with these blood-curdling reports is that most, if not all, of these cases have occurred among the degraded classes of Southern and Eastern Europe, as in the last instance recorded by Loffler (in the Wiener Med. Woch., No. 10, 1901), the victim being a Turkish peasant woman. Suffering from some obscure chronic affection, and fearing she would perish before the termination of her pregnancy this stoical creature, at the eighth month of gestation, deliberately opened her abdomen and uterus with an ordinary penknife. As the child emerged, the woman fainted from shock and loss of blood. On regaing consciousness some time afterwards the wound was sewed up, at her request, by a thirteen-year-old daughter, an ordinary needle and waxed-hemp thread being employed for the purpose. Notwithstanding these primitive measures, and the fact that a simple Cæsarean section was performed, that is, without the insertion of uterine ligatures, the woman made an uninterrupted recovery. There were no manifestations of sepsis or peritonitis, and union of the abdominal incision was unattended with suppuration. The abdominal dressing employed was a layer of moss held in place by a filthy linen cloth. The child, which also survived, was nursed by its convalescent mother.

Such cases seem to indicate the uselessness of the modern methods of antisepsis. If patients placed in the most unfavorable of circumstances can recover from the gravest of injuries without the development of any untoward symptoms, it would seem that the extreme care practiced by the modern surgeon is altogether unnecessary and waste of valuable time and material. Such cases naturally fall in line with those remarkable instances recorded of unbroken recovery following most extensive traumatism—accidental, military and surgical.

Many feet of bowel may be resected from one individual without ill-results, while a simple enteraphy in another will be rapidly followed by a fatal termination; gravel, filth, and curious foreign bodies gain entrance into the peritoneal cavity and apparently excite not the slightest irritation, while a simple exploratory incision will be followed by grave or even fatal sepsis. The explanation of this curious phenomenon must be found in some refinement and extreme developmental sensitiveness of the tissues, whereby in one case there will be an apathy of the parts to external influence and in another a high degree of reaction. It is well known that individuals of higher mental and social develodment will react more promptly to these deleterious influences than will individuals much lower in the mental and social scale. The leader in the community will succumb to a moderately severe peritoneal operation, while the hot-carrier will recover from some grave lesion without any untoward symptom to interrupt the progress of the recovery. In the auto-Cæsasean section, above recorded, and in the others that have filled the curiosity-pages of surgery, this low position in the social scale was one of the attendant features in the cases. It was because of the lack of surgical care that recovery followed, but in spite of the dangerous concomitants of the operation.

The Physicians' Strike in German Cities.

This interesting editorial appears in the Medical Record.

The physicians employed by certain medical bureaux in Leipsic and Munich are reported to have struck some weeks ago in a body. The cause of the strike was the paltry pay allowed by the associations, and failing to obtain better terms the physicians combined and formed an organization conducted upon similar priciples to those of a trade union. That the medical men of Munich were fully justified in refusing to continue their work, the statement that the pay after an increase reached the generous amount of fifteen cents a case will afford sufficiently convincing evidence. It seems, however, that the Munich doctors were not dissatisfied with this rate of payment for ordinary cases, but contended that it was not a satifactory remuneration of performing surgical operations, or for cases requiring long attendance as childbirth. The bureau held a contrary opinion, and in consequence the physicians declined one and all to work for

it. In Leipsic the circumstances resembled those of Munich except that the bureau was willing to hear complaints from physicians in its employ, but refused to recognize the organization. The strike in Leipsic, therefore, was for the principle of unionism. It is declared that there have been faults upon both sides, and that the patients are not one whit better satisfied with the treatment accorded them by the physicians than are the physicians with the conduct of the the bureau. But what can be expected from a professional man who is paid at less than the rate of a hod-carrier in this country?

The co-operative system is being pushed to absurd lengths on the European continent and even in Great Britain, and there have been ominous signs of late that the "thin edge of the wedge" is being inserted in this direction in the United States. Physicians have a perfect right to combine to avoid being imposed upon, and those of the German cities who have thus asserted themselves will undoubtedly have the sympathy of the medical fraternity in America.

Some Clinical Aspects of Chronic Nephritis.

There appears the following editorial in the Medical Record.

While the medical p ofession should be every ready to honor those of its members who have dintinguished themselves and advanced their art by important discoveries, the wisdom of employing eponymic designations in this connection is questionable, because they are necessarily undistinctive, at times confusing, and thus obstructive of progress. Thus the same name may be, and actually has been applied to more than one condition; then with the growth of knowledge it may be found that the limitations of the original name have not been perfectly defined; finally, there are few minds so capacious as to be able to store up all of the proper names that have at different times been proposed. Some of these difficulties are illustrated in the employment of the term "Bright's disease." Although the association of disease of the kidneys, albuminuria, and dropsy had been previously noted, to Bright belongs the credit of having first pointed out the dependence of the latter two upon the first; but several morbid conditions of the kidneys were comprehended in the description of Bright, so that after all it seems better, for the sake of clearness and accuracy, to employ the generic designation nephritis with its several qualifications—acute, chronic, parenchymatous, interstitial, lardaceous, cystic, etc.

A view somewhat opposed to this is taken by Dr. Alfred G. Barrs (British Medical Journal March 30, 1901, p. 753) in an address on, "Some Clinical Aspects of Chronic Bright's Disease" recently delivered. He contends that the pathological distinction made between the different forms of so-called chronic Bright's disease have little clinical value, and that there is no practical utility from a therapeutic or a prognostic standpoint in distinguishing between a large white and a small red kidney, even if it were possible to do so with certainity.

The important fact to determine, he thinks, is whether the condition be acute or chronic, as the chances of recovery are then good or bad respectively. Acute nephritis, Barrs believes, terminates either in recovery or in death, while chronic nephritis is so from the outset, and he suggests the possibility of a bacterial origin for the latter.

The opinion is expressed that the diagnosis of chronic Bright's disease cannot safely be made in the absence of albuminuria, although it is not denied that renal changes—Bright's disease in a pathological sense—may exist and the urine be free from albumin. No importance whatever is attached to the quantitative estimation for albumin, and the estimation of urea is not thought to be of any great value. The cardio-vascular changes, it is believed, are not so uniformly inevitable or so common as is generally held. The statement is made that arteriosclerosis, altogether indedendent of renal disease, is a far more common cause of cardiac hypertrophy than Bright's disease, and vascular disease of this nature is probably a cause as well as a results of renal disease. As a natural corollary chronic renal disease is not looked upon as having nearly such a common association with cerebral hemorrhage as has been supposed. Toxæmia, the inevitable result of progressive destructive disease of such a vital excretory organ as the kidney, is considered the direct and only cause of death in the vast majority of cases.

In the matter of diet Dr. Barrs makes it his rule that if the bowels are acting freely the patient may live on such ordinary mixed food, including meat, as he has appetite for and can digest. Water and other fluid sustenance should be taken freely; alcohol is to be avoided unless demanded by cardiac failure; climatic treatment may be a valuable adjunct. Of drugs nothing beyond the systematic use of purgatives, to keep the bowels acting freely, will be needed except for the treatment of special symptoms as they arise. Dr. Barrs

has no great faith in the so-called vicarious action of organs, and he believes that the proper way out of the body for urea is the kidneys, and neither the intestines nor the skin can be made to take its place efficiently. Diuretics such as digitalis are frequently of the greatest use, but they almost as frequently fail. Diaphoretic drugs, such as pilocarpine, are sometimes unpleasant and even dangerous in their effects, the hot bath being depended upon to do all that can be done. Vaso-dilators have little if any diuretic action, but may relieve dyspnœa, headache, and vomiting. Bleeding, purgation, and sweating are employed for the relief of nervous and respiratory disturbances. Morphine and opium should not be used as a rule, but not infrequently the former alone will relieve distressing and painful respiratory and mental disturbances.

The views thus briefly summarized are, as will have been seen, not in accord with current opinion; but without agreeing with them we must at least give them respectful consideration, emanating as they do from a most responsible source. A discussion in detail would carry us too far and besides seems unnecessary. In a scientific controversy, however, the motto "Audialteram partem" is a good one to adopt.

The Cause of Cancer.

According to American Medicine, by a curious coincidence, there have appeared almost simultaneously two important articles, or monographs, on the cause of malignant tumors; one in the United States, by Gaylord, of Buffalo, the other in Germany, by Schuller, of Berlin. This remarkable synchronism reminds us of the descovery of Neptune, accomplished almost at the same moment, but independently, by Adams and Leverrier. Whether the observations of the two pathologists will bear the scrunity of time as well as the discovery of the two great astrophysicists is not altogether removed from the realm of doubt. We have already referred to Gaylord's studies, and shall at this time speak primarily of those of Schuller.

In a brief communication dated March 15, 1900, Schuller announced that by a happy circumstance he had succeeded in cultivating from sarcoma and carcinoma a well-defined parasite, probably animal in nature. By selective methods of staining, he had also been able to demonstrate the presence of this parasite in all tumors examined, and had undertaken animal experiments; but at the time of the preliminary communication these were not in a state of completeness, and a further detailed report was promised. This has just appeared in the form of a monograph of 120 pages, with three plates and 64 text illustrations. contains a description of the parasite discovered by the author, of the methods of cultivation, and of the results of animal experiments.

The failure of others to discover the cause of cancer Schuller ascribes to improper methods of study. He cultivated the organism in the tumor tissue itself, in the following way: Immediately upon the removal of the tumor, while the latter is still warm, a piece is cut out of the center and placed in a sterile glass vial, which is at once transferred to an incubator and kept in the dark at 37.50 deg. C. In his earlier investigations, Schuller introduced the vial into the peritoneal cavity of an animal, but found that a well-regulated incubator would satisfactorily replace the living body. After a few days colonies appear on the sides of the bottle, in the form of fine, sago-like granules or droplets. Under the microscope these colonies are seen to be made up of large, golden-yellow capsules, occurring singly or in chains or masses; and of small, spherical bodies, having a radially striated margin. There are only minor differences between the capsules obtained from carcinoma and those from sarcoma. Those from the former appear to be a little smaller, and their walls are less thick. In the protoplasmic contents of the capsules a nucleus can sometimes be seen. The contents of some are granular, of others made up of small angular or rounded bodies. These latter increase in size and stretch the capsule until it bursts at one or more points, giving the bodies their freedom. This represents a cycle of development, and the small bodies are the young organisms of the parasite. In the hanging drop the small bodies are golden-yellow, and invariably strongly lustrous. The border is double-contoured, and presents a radial striation. The organism also possess cilia, by means of which they keep np a constant wavy motion. Peculiar appearance are produced by the degeneration and disintegration of the parasite. The cultures may be kept alive for months by the addition of fresh normal human blood. On the addition of rabbits' blood the organisms die. Careful studies of organisms suspended in human blood were made by means of the hanging drop. Various phases of development could be traced by that way. The color of the organism, which seems to be an invariable charactcristic, is produced by a ferruginous pigment of the nature of hemosiderin. By the examination of teas-

ed preparation, on a warm, sterile slide kept upon a warm stage, the organisms could always be demonstrated in fresh tumor tissue. The parasites were also found in the urine of a patient in whom a carcinoma of the uterus had ruptured into the bladder. For the demonstration of the parasite in sections, it seemed most satisfactory to clear the tissue in one of the ordinary oils (especially oil of lavender) without preliminary staining. For purposes of staining, hematoxylin-alum was most serviceable. The striking features in all sections are the large capsules, which occur in rows or as a meshwork throughout the tissue, often forming honeycomb-like structures. In some carcinomas what appeared on superficial examination to be trabeculas of connective tissue, on careful study proved to be made up of compact rows of capsules. In the neighborhood of the capsules young organisms are found in abundance. In the hardened tissues the form of the latter is considerably altered by pressure and contraction. They frequently permeate the tissue in long rows, and occur between as well as within the cells. They are found not alone in the orginal tumor, but also in the regional lymph glands, even in such as present no macroscopic alteration. Schuller thinks that they may be carried to the lymph-glands within epithelial cells, the multiplication of which they stimulate in the new environment; yet he is inclined to revive the long-abandoned hypothesis of a metaplasia, and to assume that the parasites are capable of causing a transformation of connective tissue cells into epithelium. Numerous parasites in the capsular and the free stage are constantly found in the pearly bodies of the epitheliomas. Studies of the border zones of carcinomas give an insight into the earliest phenomena of cancer development, and show that the parasites bear a most intimate etiologic relation to the tumor growth.

The animal experiment, the details of which are only briefly given, were made with the sterile cultures obtained in the manner previously described. In order to exclude the possibility of transplantation of tumor tissue, the material was taken from vials in which the cellular elements had been entirely destroyed and dissolved. One experiment, in which the injection was made directly into the kidney, gave rise to the development of a barcinomatous nodule in the organ. The cells of the growth contained the young parasites, as well as the capsules. Even the appearence of epithelial pearls was produced. In the same animal, the lymphatic glands in the neighborhood of the portal vein showed alterations that could be interpreted as incipient carcinoma. In some of the animals which had received intraperitoneal injections, the pancreas was the seat of carcinomatous transformation. Even the regional lymphglands showed epithelial cell accumulations. The lives of the animals contained the parasites in large numbers, but there was no actual development of carcinoma. One animal received an injection of sarcoma culture into the peritoneal cavity. The liver was filled with parasites of the same nature and having the same pigment as those of the original tumor—a pigmented giant-cell sarcoma of the jaw. The interlobular connective tissue showed distinct transformation into sarcoma.

On the face of things it must be admitted that Schuller's discovery fulfils all the requirements that could be demanded of a parasitic agent. He found it in the primary disease, cultivated it (of course, only after a fashion), reproduced in the original disease in the lower animals, and recovered the organism from the experimental lesions. Whether it is the cause of cancer and sarcoma, however, can be demonstrated only by the corroborative testimony of other, unprejudiced, investigators.

An interesting question at this time is, What relation do Schuller's bodies bear to those described by Gaylord? So far as we can determine from reading the respective articles, they are not identical. Gaylord identifies the organisms discovered by him with Plimmer's bodies; but it seems to us that the bodies found by him in the fresh tissue and in cancerous fluid are entirely different from the parasites observed in the stained sections, and are, perhaps, the same as those depicted by Schuller, differing from them principally in the absence of color. As mentioned above, Schuller finds that his parasites are different from those discovered by Plimmer. If the bodies described by Gaylord and by Schuller are not identical, they cannot both be the cause of cancer, As far as Schuller's bodies are concerned, no one in this country has, presumably, checked his observations by personal examination, nor are we aware that Schuller has presented his specimens to any medical society. Until then, an attitude of scepticism is eminently justifiable. It is different with Gaylord's observations. His work has been more or less constantly under the eye of other authorities, and has been freely submitted to the scrunity of disinterested men. His recent article, however, is silent concerning the appearances of the parasite on culture, and as to the results of animal experi-

ments with the organism in a pure state. Plimmer claims to have isolated his parasite, and the cultures are those of yeast; yet it is maintained by Gaylord that the organism discovered by him—identical with Plimmer's body—is not a yeast. We are thus left in doubt as to the nature of the impatiently awaited appearence of Gaylord's second article.

Some Therapeutic Uses of the Actual Cautery.

Concerning the subject the Record says; Despite the activity in physiological research displayed in recent years, we are still without a satisfactory explanation for the efficacy of certain therapeutic measures that have long enjoyed successful employment. In treatment especially it is a wise rule to hold fast to that which is good, and, while ever maintaining an open mind, not to be carried away by the enthusiasm attending the introduction of every new remedy. Here, as elsewhere, the safe position is midway between extreme radicalism and extreme conservatism. There can be no doubt that many useful therapeutic measures employed at one time or another have fallen into undeserved neglect, while others of unproved utility are used all too liberally because of their novelty alone. It seems possible, further, that the vast number of drugs, so easy of administration, that have in recent years been evolved have perhaps too largely replaced certain manipulative measuses for which no true substitute has been provided. Among these are bleeding by leeches, cupping-glass, or lancet, and counter-irritation by blister, moxa, cautery, setons, and the like.

In a practical address delivered recently before the Hunterian Society, Sir William M. Banks spoke of the neglect of the actual cautery in surgery, and reviewed some of the conditions in which this agency was capable of affording relief. Thus the periostitis and ostitis developing at a late stage of syphilis, and often attended with agonizing, boring pain, will often be remarkably ameliorated by thorough application of the actual cautery at a white heat, the patient being anæsthetized and constitutional medication being of course not neglected. So, too, the actual cautery, conjoined with rest and a properly applied splint, can be employed with great advantage in the treatment of certain diseases of joints, especially the knee-joints, in gouty or rheumatic individuals, resulting from traumatism, when the condition is one of synovitis, with swelling of the articular ends of the bone and thickening and matting of periosteum, fascia, ligaments, and aponeuroses. The use of the cautery is indicated further in the presence of acute inflammatory conditions of the spinal column and the spinal meninges following traumatism. In addition to the foregoing conditions for the relief of which the cautery has been used, Banks recomends its employment in the treatment of cases of pruritus and of undetermined pathology, attended with exaggerated wrinkling of the skin around the anal orifice and presenting an apperance suggestive of slightly damp, rugose wash-leather. This condition has proved exceedingly resistant to all forms of treatment, but it will usually yield promptly to the application of the cautery.

Mental Contagion.

There has always been a great deal written about mental contagion, and there are some who believe in its existence. In an editorial in the Journal of the American Medical Association the following occurs:

Every little while some non-medical authority propagates a theory as to the contagion of mental diseases, and this is sure to be brought out if an asylum physician succumbs to such disorder. Association with minds diseased is then dilated upon and extensive generalizations are indulged in on very slim foundations. As a recent instance of this may be mentioned an editorial in a yellow journal par excellence, in an interior city, on the alleged mental failure of a prominent ex-asylum superintendent. The individual in question was over 80 years old and had suffered, we understand, from a shock of paralysis, two facts which would probably sufficiently account for such failures in memory, etc., as actually existed, but the chance was too good to be lost and the usual commonplaces had to be indulged in regard to the perils of association with the mentally afflicted and a moral drawn on the mental effect of associations generally. About one person in about three hundred and fifty is insane enough to be counted as such, in the general population, and a rigid drawing of the line would probably increase this figure. It is extremely doubtful whether any much larger proportion than this could be found in those who are intimately associated with the insane, excluding, of course, relatives, and others who obviously share the same heredity and predisposition. There is such a thing as mental contagion; it is notoriously marked in hysterical cases, but there is very little evidence of any real transmission of serious mental disease, simply as such, to persons of healthy mental organization and not possessing any organic predisposition or

heredity. The cause of insanity may be an infection, as is probably that of general paralysis or paresis which seems to be sometimes communicated from husband to wife, but the method here is not obscure and is purely physical. In the ordinary use of language we can not speak of insanity as contagious. These are commonplace facts, but the notion is occasionally in evidence even in medical journals and its correction is therefore not altogether amiss.

A Greeting to the New Graduate.

The New York Medical Journal offers the following greeting to the new graduate.

At this season of the year, when our metropolitan schools are conferring the much-coveted parchment, we are reminded of an anecdote concerning the late Dr. Alonzo Clark. When Dr. Clark, who was professor of the principles and practice of medicine in the College of Physicians and Surgeons, was in his prime, so the story goes, a member of the graduating class called on him at his house one morning for the purpose of having his chest examined, for he feared that he had incipient pulmonary disease. Having undergone the examination and received the welcome assurance that his lungs were sound, the young man asked the doctor what his fee was. "Oh, nothing, sir, nothing at all." "Why, how is that?" "Well, you know, dog doesn't eat dog." What do you mean, sir?" "Simply that one doctor doesn't charge another doctor for professional services." "But, you know, Professor Clark, I'm not a doctor; I'm only a student." "Very well, dog doesn't eat pup." And there was nothing for the young man to pay.

It is in this brotherly spirit, dear young graduate, that we battered old fellows welcome you to our ranks. There is no trade-unionism in medicine. Hard as we all have to work for our mere living, we seek not to melt away our difficulties by setting a limit on the number of apprentices, by forbidding work after hours, or by persecuting those who set a more modest value on their services than we set upon ours. No sooner do the young graduates of each year secure the right to practice than they become our brethren, What is the lot of the young physician? Almost that of a suppliant. After working hard for long, weary years—far harder and longer than either the clergyman or the lawyer—he must incur the expense and endure the waiting that are the inevitable clogs to even moderate progress in his practical career. To the clergyman success is apt to come all at once or not at all. The lawyer, like the doctor, generally has to wait, but he can do his waiting at a cheap rate, for, with desk-room in a decent locality, he may live in the suburbs or in the slums. The doctor, however, must have an expensive outfit, and in this part of the country he must almost of necessity live in the fair neighborhood in which he makes his bid for patronage.

We say this, dear youngster, not to dispirit you, but to give you a lively realization that we have all gone "through the mill," and thus to let you know that an allwise Providence has not singled you out for the dreariness of waiting unprofitably. It is because we have all had your forlorn experience that we unhesitatingly and without reservation stretch out to you the hand of welcome. This is all in the way of sentiment, as, of course, you understand; we may shortly add something in the way of advice.

The Bacteriology of Eczema.

According to medicine, until recently this disease has been regarded as peculiarly due to local changes in the epidermis and alternations in the circulation of the skin, to which no definite cause could be assigned. For centuries it has been necessary for all systems of medicine to invoke a special irritation to account for these visible changes. We have the dartrous diathesis of the French, the "psora" of the homeopaths, and the omnipresent uricacidemia of the modern scientific school.

At the last Dermatological Congress, and also at the International Medical Congress, the question of the parasitic nature of eczema was much in evidence, the leaning being distinctly toward the view that in this disease there was an infection of the skin by staphylococci or streptococci. Our knowledge of the pathologic action of these germs has broadened very much in the last few years. Formerly they were regarded as pus-formers pure and simple, and to say that pus was present was to mean that these germs were contained in it. Later studies have shown that these views are not correct; that many germs which had heretofore been thought to cause specific changes in the tissues, but not suppuration, have been found capable of forming pus. On the other hand, the so-called pus-formers are found to initiate changes in the tissues which do not lead to suppuration.

The extraordinary series of studies which have been made of late years have been partly based upon direct observation and cultivation of the microorganisms in eczema, and partly upon a renewed study of its

clinical history in the light of our late knowledge of the pathogenic microorganism. The conclusions which have been reached place our knowledge of eczema upon a broad foundation, and show that a very large proportion of the cases are due to a direct infection by a pathogenic microorganism. It may have its entrance through a solution of continuity in the epidermis; or some irritation may so alter the nutrition of the superficial layers of the skin that germs which are already present become active.

The Real Effect of Alcohol.

We take the following from the Therapeutic Gazette.

There can be no doubt that during the last ten years a large amount of scientific research has been devoted to determining if possible the actual effect of alcohol upon various organs in the body; and there can be no doubt that most of the results which have been obtained from these methods of research have seemed to prove very conclusively that many of the ideas held by the medical profession and the laity concerning the therapeutic value of this substance are erroneous and based upon improperly collated facts or upon distinct errors in judgment, as to the results produced by its use. During this period there have, of course, appeared a large number of papers, many of which were not scientific, either in the method of their presentation or in the array of facts which were adduced; and with these papers, which have usually been written by fanatical opponents of the drug, or by those who are unduly enthusiasttc concerning its effects, we shall have nothing to do at this time.

Just at present there is probably no one, of higher scientific reputation, who seems to be more strongly opposed to the common views held concerning alcohol than Schmiedeberg, who is the Professor of Pharmacology in the University of Strasburg. This celebrated investigator holds that alcohol belongs to the class of nerve and muscle poisons of the fatty series, and that it is a part of the special group which is made up of such substances as chloral hydrate, sulphonal, paraldehyde, and anesthetics like chloroform and ether. Not only is this conclusion reached because of its chemical relationship to these substances, but also because he believes that its physiological effect is to a large extent identical with them. In other words, Schmiedeberg believes that when we speak of the stimulating effects of alcohol we are speaking of something which practically does not exist; and as lately as 1895 he has asserted that the intellectual faculties, instead of being made more acute and perfect under the influence of moderate doses of alcohol, are distinctly impaired. Other investigators have shown that while a person seems to perform mental labor with greater readiness under the influence of alcohol, in reality he accomplishes less. So, too, other experimenters, chiefly in the French school, employing the dynamometer, or Mosso's ergograph, assert that while alcohol increases the working power for the first fifteen minutes, it afterward produces a depressant influence, and that an actual decrease results in the amount of labor performed in an hour.

So far as the influence of alcohol upon the heart is concerned we do not think that a large amount of scientific evidence has been adduced to prove that it has no such stimulating influence as has usually been attributed to it, and some of the investigations which are quoted as indicating that the influence of alcohol upon the circulation is not stimulating are certainly inadequate. Schmiedeberg, whose opinion from a pharmacological point of view is certainly worthy of great respect, denies that this drug produces even a quickening of the pulse, apart of the stimulating circumstances under which alcoholic drugs are usually taken, and thinks that any benefit which occurs in cases of cardiac weakness or relation of the heart muscle under its use is not due to the stimulant influence of the medicament so much as to its effects upon the respiratory functions.

Careful researches as to the effect of alcohol on the respiration are also lacking, but no less an investigator than Binz has asserted that it is a distinct stimulant to the respiratory center.

When we come to a consideration of the influence of alcohol upon the tissues of the body there is a still greater difference of opinion between investigators, and as has been well said in the Edinburgh Medical Journal for March, 1901, by J. Mackie Whyte, the question as to whether alcohol is a food or a poison is still a matter of as hot debate as it was twenty or thirty years ago. Whyte points out that moderate quanties of alcohol—that is to say, about two ounces—are usually oxidized in greater part in the body of the strong, well-developed man in the course of twenty-four hours, and because of this oxidation it has been claimed my many that a transformation of potential into kinetic energy takes place, which kinetic energy may be employed to produce heat, functional activity, or ordinary voluntary exertion. He also quotes Atwater's experiments, which are now so well known,

and which were published in the Bulletin of the Uni'ed States Agricultural Bureau, No. 69, about eighteen months ago, which seem to indorse the view just expressed. Whyte, on the other hand, seems to think that the administration of alcohol to the average individual is distinctly deleterious, and that it usually results in impaired resistance to the attacks of infectious diseases. He then goes on to point out how those who abuse alcohol are peculiarly susceptible to diseases such as pneumonia and tuberculosis, and that animals which have received considerable quantities seem to be unduly susceptible to the infections of anthrax, tubercule, and diphtheria.

These facts must be regarded with much care. There is a great difference between a consideration of the influence of alcohol in impairing vital resistance when it is taken constantly and in poisonous doses, as by the ordinary drunkard, when it is used rationally by the skillful physician. So, too, in many instances when alcohol has been administered to animals and has been found to impair their vital resistance, a careful study of the experiment reveals the fact that the doses given to the animal have been inordinately large and far in excess of those which are commonly taken by man, even when he abuses this drug. Thus, as much as six ounces was not infrequently administered to some dogs, and as the average dog probably weighs from ten to fifteen kilos, and the average man five times as much as this, this dose will be the equivalent of ten ounces, which while it might not be excessive if distributed over twenty-four hours, would be excessive if given in one dose or if continued daily for a long period of time amounting to weeks or months. At this point the experimental evidence which has been adduced seems to be particularly antagonistic to the clinical evidence, which is usually regarded with favor. Physicians innumerable administer alcohol during the course of infectious processes with the idea that it supports the system and aids the patient in withstanding infection. It would seem scarcely credible that the combined thousands of physicians can be erroneous, and that the results of a few experiments can be correct, although, of course, it is true that if the drug is abused it does harm.

We have written this editorial without being able to adduce any very good grounds for doubting the series of experiments which we have touched upon. We are forced by the standing of the various investigators whom we quoted to pay respectful attention to the views which they advance. But we are also forced by what we have seen at the bedside to the conclusion that alcohol is a valuable drug in many conditions in which, so far as our present knowledge goes, a stimulant seems to be urgently required; and we certainly shall continue to use it as a stimulant in cases in which we believe that it is indicated until it can be clearly shown that the symptoms produced by it, which we have been wont to consider favorable, are really unfavorable, and that the drug possesses none of the qualities which have hitherto been assigned to it.

Food Value in Practical Life.

According to the Medical Age, the nutri tive coefficients of food formulated in well arranged tables do not impress the popular imagination with the same force as do dietetic facts stated in homely and proverbal phrases. It will doubtless take a long time to disabuse the public mind of many false propositions which have impregated it through the sanction of ancient practice, but it is also interesting to note how that much that was taught as science has had to be revised, and that in regard to what we shall eat the stomach is after all the final court of appeal. The lessons taught by daily life sometimes are at variance with those promulgated from the laboratory.

A rent work on dietetics, by Dr. Hutchison, an English writer, has amphasized some of the facts of food values in an excellent way. The cherished notion that fish is a food for the brain worker has been consigned to oblivion, though many fish are cheap foods. Salmon at 35 cents a pound is cheaper than cod at 15 cents. Oysters are favored among fish foods for the convalescent, but twelve oysters have not the nutriment of one egg. So, too, is the white of one egg equal in value to three teaspoonfuls of most beef extracts. "It is pathetic," says the writer, "to see poor people in cases of illness paying a large price for so very small a return."

The question of vegetarianism may almost be said to be settled by modern dietetic science. The strict vegetarian to obtain a living wage of tissue-formers must almost fill his stomach to its utmost limit three times a day. It means a low standard of life, and weak resistance to disease. It is not without reason the more energetic races of the world have been meat eaters.

Alcohol in moderation is considered by this author to be a valuable aid in the running of the human machine. It is used up in the body; it is a food, and spares the combustion of fat. If, however, it exceeds the qantity taken to act as a food, it acts

as a poison, and the percentage of waste rises. Alluding to "three-bottle men," the author says: "One is tempted to think that the power of our tissue to oxidise alcohol has abtually undergone a decline." The notion that "fusel oil" is the deleterious agent in poor whiskey is exploded, though a volatile oil is suspected. Dr. Hutchison is a firm believer in bottled stout, and considers it the model soporific. "It is far better than opium," he says, "and produces more nearly natural sleep."

The diet of middle age must be carefully considered. The more rotund you become the easier it is to roll down the hill of life. Though it is better to eat too much than too little, yet remember you are probably eating enough for two. The proverb which says that the man who at forty does not know his own stomach is a fool, is probably true, but there are nevertheless numbers of rools.

The French and English Birth-rates.

In an editorial in the British Medical Journal we find the following:

In a well-reasoned letter to the Times, Dean Fremantle draws attention to the serious decline in the English birth-rate, on which comment has been frequently made in our colums. In the year 1875 the birth-rate in the United Kingdom was 35 per 1,000 of the population, in 1900 it was only 29. This means for our population of 41½ millions adefficiency of 249,000 children for each year, and implies, as pointed out by Dean Fremrntle, a much more rapid decline of the birth-rate than in France, in which the process has been a slower one and longer established than in this country.

In an article in the British Medical Journal of June 22nd (page 1564) the net result on natural increase produced by the lowered birth-rate and death-rate was shown; and it was made clear that the lowering of the death-rate is not keeping pace with that of the birth-rate, and that in the future, as the average of the population increases pari passu with lowering of the birth-rate, the balance of increase of population is likely to become less. The lowering of the birth-rate and the resulting lowered rate of natural increase of the population have been concealed by the greater amount of immigration in recent years, and by the lowered death-rate by means of which we have saved about half the loss due to the lowered birth-rate.

The general cause of the serious decline in the birth-rate is not difficult to discover. It is correctly attributed in the letter already mentioned "to the wish for ease and material enjoyment." That it is some general cause and not circumstances impeding the subdivision of properties to which it has been attributed in France, is shown by the international character of the reduction of the birth-rate. Some further light is thrown on the means by which large families are prevented, by the fact that the reduction in the birth-rate has been much greater in Protestant than in Roman Catholic countries. France appears to be an exception to this rule; but that country is largely materialistic, and it is doubtful if Roman Catholic teaching on this subject dominates the population. The reason why Roman Catholic population show a much smaller decline of the birth-rate than Prostestant population is that among the former the production of abortion and the prevention of conception are alike regarded as deadly sins, the continuance of which prevents absolution from being obtained That there is no essential physical reason for the decline in the birth-rate in France is shown by the enormous birth-rate of the French Canadians, who remain orthodox as well as prolific.

The fact cannot be disguised that the chief means by which the great lowering of the birth-rate in most civilised countries has been brought about has been by the dissemination of instruction as to the means of artificially preventing conception. The medical profession as a whole has set its face against such practices, which are unnatural and degrading in their menal effect, and of times injurious to both husband and wife in their physical results. A small number of medical men have held and taught other views, but the evil has been chiefly caused by cheap phamphlets on the subject, and by advertisements in weekly and other newspapers (often so-called religious newspapers(which under a very thin disguise offer facilities for procuring abortion or preventing conception. Dean Fremantle's letter gives us some hope that the voice of the clergy may be heard more clearly in protest against such practices and that the public conscience may be roused to secure an abatement of what is a great national danger.

The prevention of conception is doubtless the chief cause of the lowered birth-rate. More attention needs, however, to be given to the production of abortion, which, it is to be feared, is more prevalent than is commonly imagined. The recent discovery of a large number of unburied babies' corpses in an undertaker's establishment in Birmingham illustrates furthermore the evils lurking behind our national culpability in neglecting to insist on the registration of stillbirths. We have in

such facts as these opportunities for the prevention of livebirth when ought not to be possible; and although they are only a small portion of the cause of the decline in our national birthrate they urgently require reform.

Sterility and Fecundity.

According to The Philadelphia Medical Journal, at the recent session of the Gynecological and Obstetrical section of the American Medical Association, there was probably no more interesting discussion than that which followed the reading of the paper by Dr. George J. Engelmann, of Boston, on "The Increasing Sterility of American Women." Aside from the moral questions that were touched upon by this distinguished statistician, who holds the enviable position of the world's leading authority in his chosen line of investigation, the subject has a bearing of great civic and national importance. Long accustomed as we as a nation have been to consider ourselves a fruitful and progressive people in marked contrast with some of the races of Southern Europe, notably the French, Dr. Engelmann's statement that to-day we are the least fruitful people of the world, comes with appaling frankness. As clearly portrayed by figures that it will admit of no controversy, to-day the American born people show a fecundity of less than 2 children per marriage. That is to say, there are barely two children born to a family among those who can claim to be native white Americans. One hundred and more years ago, during the colonial period, the fecundity stood at 6 per marriage, while to-day the general European fecundity is 4.5 per marriage and the French Canadians show the enviable record of 9.1 per marriage. Closely associated with the foregoing statement is the occurrence in Europe of one miscarriage to every 3.3 labors, while in this country a premature expulsion of the ovum occurs in 2.8 labors. Dr. Duff, of Pittsburg, in the animated discussion that followed emphasized the importance of suppressing the obnoxious advertisements with which the pages of the daily journals teem, and reiterated his belief that dire calamity will fall upon the editorial management of these journals for admitting such dangerous and non-patriotic advertisements to the columns of their papers. It is undoubtedly high time that we, as a people, should give this matter of fecundity and sterility careful attention, and still more that we physicians, as the medical guardians of the nation's welfare, take such measures as will tend to suppress vice and encourge the propagation of the race. Dr. Duff's suggestion, which was unanimously endorsed by the meeting, that hereafter the United States Census take note of the paternity (parental nativity), sterility, and fecundity of the people, is a most excellent one. The publication of such records would do much to open the eyes of the best element of the country to the danger that is impending. It is also most importand that the blame of sterility be placed where it properly belongs, and that the great frequency of double epididymitis as a causative factor be more generally appreciated. As to the willingness of individuals to assume the important responsibilities of maternity or paternity, this is a phase of the subject that can be influenced only by appealing to the morals of the people. As was suggested by one of the women delegates, an improvement in this direction might be instituted by substituting the questions: "Are you willing to become a mother?" "Are you willing to become a father?" at the time of issuing the marriage license. Failure to acquiesce, in her view, would be deemed ample reason for refusing the license on the ground that legal prostitution could not be countenanced.

The Right to Will One's Dead Body for Scientific Research.

In the British Medical Journal May 25, appears as an editoral the text below:

It is generally believed that a man can leave his body for dissection, and we believe that every now and then persons suffering from some rare disease or interesting anomaly offer the reversion of their tenements of clay to the College of Surgeons or to a medical school for a small immediate consideration. Phillosophers like Jeremy Bentham and men eminent in various spheres of intellectual work have directed that their remains should be used for scientific purposes, and mutual dissection associations have been formed by enthusiast. But has a man any power to will away his dead body? There seems to be some doubt in the legal mind on the point. The Supreme Court of California, in a recent contest between next of kin, on the one hand, and claimants under a will, on the other hand, for the possession of a corpse, ruled that a man cannot by will dispose of that which, after his death, will be his corpse. The custody of the corpse and the right of burial belong to the next of kin in preference to the administrator. This view is based on the fact than the general English and American legal author-

ities establish the rule that, in the absence of statutory provisions, there is no property in a dead body. This legal doctrine is so far true that in the days before the passage of the Anatomy Act "resurrection" men were prosecuted, not for stealing corpse but the coffins, winding-sheets, and other portable property connected with them. But it is surley a new doctrine that a man may not make a testamentary disposition of his dead body for the furtherance of science.

MISCELLANEOUS.

Editors Charlotte Medical Journal:

DEAR DIRS:—I have been much interested in the June No. of your Journal by reading the papers and discussion on the "Treatment of Pneumonia."

In the Medical Record of February 18th, 1893, page 201, will be found a short article by myself on "Opium in Shock and Pneumonia." In that article I gave my reasons for thinking opium the proper heart stimulant in pneumonia. It is to my mind the one thing when properly given that will sustain the heart's action in the crisis, and is of the greatest service in the alcoholic habitues.

I quote from the article: "Opium is a narcotic, and as such has a double action. The first to stimulate, and the second to depress the nerve centres, much the same as alcoholics." * * * * "Not only is opium of great use in the collapse that follows surgical shock, but I have found it of the greatest possible service at the critical stage of pneumonia, which is only another form of collapse." * * *

"My plan has been to begin with one-eighth grain of morphine every two hours; as soon as the pulse showed that it did not respond to brandy given frequently, any sign of flagging has been met by increase of dose, and a shorter time between doses, until in a number of cases I have given one-quarter grain every hour for two days with no suspicion of narcotism. I would not hesitate to push it much farther if the heart was not sustained by these doses. Of my last thirty-eight cases thus treated only three have died—aged respectively eighty, eighty-one, and eighty-five years."

Care must be taken that the doses are not omitted, or else the drug would, by its secondary effect, carry the patient down. So too, when the crisis is past, we must slow down gradually, first lessening the amount of a given dose and then lengthening the time between doses.

It will also be found that there is no tendency when opium is thus administered to lock up the excretions. Diaphoresis is often quite pronounced, and the bowels move as well or better than when morphine is not given.

I hope some of your readers may be induced to try morphine in this way.

Since the publication of this article I have a large number more with the same approximate death-rate.

WICKES WASHBURN.

The Treatment of Myoma of the Uterus.

A more scientific study and treatment of stammering is one of the demands of progress and humanity. It has been said that there are more "speech-hesitants" than there are blind, mute and insane combined. This large class of sufferers has been left in a shameless inconsideration. The affliction is always wide-reaching in its influence upon the patient's life and character, and frequently results in the most pathetic of tragedies. There is reason to believe that proper attention and treatment would usually lead to perfect cure. Here is a reform and a work waiting for wide-awake and progressive school boards, and medical officials interested in our public schools. Stammerers have quite as just a claim for public guidance and help as have those afflicted with disorders of sight, hearing, etc. It is not sufficiently well known that the first regular professorship of disorders of speech in a medical college was established in Philadelphia several years ago and has in practice demonstrated the wisdom of those who advocated it. So far as we know there is not a second in the world. There should be a hundred, as the work is in the interests both of humanity and of science.—*American Medicine.*

The Treatment of Stammering.

L. Schaller discusses the indications for palliative and ratical treatment of uterine myomata. He not only will not operate in ordinary myomata of the anterior wall that are about the size of a hen's egg, but considers it inadvisable to tell the patient that she has a growth in the uterus at all. In a certain number of cases myomata produce no symptoms, and, if discovered by the practitioner, need no special consideration beyond an examination from time to time. In the majority of cases, however, he points out that the patient consults the practitioner on account of definite symptoms, which are variable according to the size and location chiefly. These symptoms he enumerates as follows:—Pressure—in enormous growths

this may include pressure on the abdominal organs, diaphragm, and thoracic organs while smaller growths produce pressure symptoms on the pelvic organs, and chiefly on the bladder. Difficult and painful micturition may necessitate daily catherisation, and this may eventually lead to cystitis and pyelitis. The consideration of this latter may lead a surgeon to relinquish palliative for operative treatment. Pain—this is due at times to definite uterine contractions caused by the presence of one or more myomata projecting into the cavity of the uterus. At times it is due to perimetric irritation, to the pulling on adhesions, or to the inflammatory changes in the appendages. Stitching of the ligaments may also produce pain. Under this heading he includes dysmenorrhœa—bleeding. This takes place either as menorrhagia or metrorrhagia. It may be of any degree; and although the author denies that fatal hæmorrhage ever occurs, he points out that the patient may succumb to symptoms produced more or less indirectly by the bleeding. He next discusses the changes which may take place in the growths, and mentions malignant degeneration, which of course calls for early total extirpation of the uterus, and which may show sarcomatous, carcinomatous, and myxomatous changes. The myoma may baeak down and suppurate, in which case he advises a vaginal extirpation.—*British Medical Journal.*

Rules for Dyspeptics.

First.—Eat slowly, masticating the food very thoroughly, even more so if possible, than is required in health. The more time the food spends in the mouth, the less it will spend in the stomach.

2. Avoid drinking at meals; at most take a few sips of warm drink at the close of the meal, if the food is very dry in character.

3. In general, dyspeptic stomachs manage dry food better than that containg much fluid.

4. Eat neither very hot nor cold food. The best temperature is about that of the body. Avoid exposure to cold after eating.

5. Be careful to avoid excess in eating. Eat no more than the wants of the system require. Sometimes less than is really needed must be taken when digestion is very weak. Strength depends not on what is eaten, but on what is digested.

6. Never take violent exercise of any sort, either mental or physical, either just before or just after a meal. It is not good to sleep immediately after eating, nor within four hours of a meal.

7. Never eat more than three times a day, and make the last meal very light. For many dyspeptics two meals are better than more.

8. Never eat a morsel of any sort between meals.

9. Never eat when very tired, whether exhausted from mental or physical labor.

10. Never eat when the mind is worried or the temper ruffled, if possible to avoid doing so.

11. Eat only food that is easy of digestion, avoiding complicated and indigestible dishes, and taking but one to three kinds at a meal.

12. Most persons will be benefited by the use of oatmeal, wheat meal, cracked wheat, and other whole-grain preparations, though many will find it necessary to avoid vegetables, especially when fruits are taken.—*Public Health Journal.*

The Anodyne Treatment of Acute Peritonitis

McCaffrey ("*The Etiology, Pathology and Treatment of Acute Peritonitis,*" observes that the most pronounced indication for treatment in peritonitis is that for the relief of pain. Blisters and counter-irritation, the older resorts are practically useless. Hot-water bags and poultices are far superior, but the relief they afford is only temporary. In some cases the ice bag is more gateful than hot applications. But whether hot or cold is employed, it should be relied upon only until other lines of treatment can be instituted. Papine should be given in teaspoonful doses every hour, and the doses repeated frequently enough to afford the desired results. Relief from pain, short of narcosis, should be sought, and this is generally easily obtained by proper dosage. Papine does not produce nausea, but rather prevents this symptom. In the event of the development of more or less prostration, a proper stimulant, such as strychnine or nitro-glycerine, should be judiciously employed.—*Medical News.*

Yellow Fever and Diet.

Of all fevers yellow fever in particular has been looked upon as due to filthy and insanitary surroundings. The good work done by Major Valery Harvard, Chief Surgeon of the Dedartment of Cuba, will go far to demonstrate the fallacy of this theory. The ordinarily accepted view in regard to the etiology of yellow fever has hitherto been that it is an acute specific contagious disease which occurs almost exclusively in crowded towns, and especially in those having a maritime commerce, af-

fecting negroes less than whites, and rarely attacking the same individual a second time. It was concluded from the evidence supplied by the epidemic of yellow fever in Swansea in 1865, and from a case that occurred also in England in 1878, that it was contagious from man to man like other fevers, adhering with great tenacity to clothes and especially lingering about the hulls of vessels. Major Harvard has now shown, from his unequalled experience in Havana, that there is no visible correlation between dirt and yellow fever, in fact the district which he notes as having been most seriously affected was one of the cleanest and best looked after from a hygienic point of view, whilst the last focus of infection that was observed was one of the most insanity wards that could be imagined, and that only became infected to a slight extent. Yellow fever, according to Major Harvard, does not follow the course of previous infections, but rather the movement of those who are not immune to the disease; the fever is chiefly conveyed by means of the yellow fever-bearing culex, and is now supposed to be spread in the same manner as malaria is spread by the anopheles. Fomites and contagion have nothing to do, according to this view, with the increase of the disease, and the problem now is how best to destroy the particular mosquitos that are the cause of the infection, and the solution of that question needs time.—*Medical Press and Circular.*

Six Notable American Medical Achievements.

In an interesting address recently delivered to the graduates of the Medical and Dental Departments of the Columbian University in Washington, Dr. G. E. de Schweinitz picked out for special distinction the work of six American doctors in medicine and surgery. These contributors to science, who have each done some epochal work, are Beaumont, for his work in gastric digestion; Gerhard, for his observations that led to the differentiation of typhoid and typhus fevers; Gross, for his pioneer work on pathological anatomy; Oliver Wendell Holmes, for his recognition of the contagiousness of puerperal fever; H. C. Wood, for his work in therapeutics; and S. Weir Mitchell, for his rest cure. This list might, as Dr. deSchweinitz justly says, be somewhat enlarged, and we should certainly not omit from it the names of Ephraim McDowell, who performed the first ovariotomy, and of the greatest benefactor of all, Morton, to whom the world owes the first practical demonstration of ether anesthesia. As Americans, we cannot too jealously guard the fame of Morton, for there has been at times some tendency to detract from the honor which is his. Dr. deSchweinitz's address was an eloquent plea for the originality of some of the best work that has marked the progress of medicine in America, and was especially appropriate to the occasion. American medical students and graduates cannot be taught too earnestly to respect the work of their own countrymen, and not to look abroad too exclusively for knowledge and initiative.—*The Philadelphia Medical Journal.*

Treatment of Snake-bites

Babu Atul Chunder Banerjee, in charge of the hospital of the Balijan tea garden, writes to the Times of Assam of the successful treatment by him of a snake-bite under the following circumstances: "A cooly woman, while working in the garden, was bitten by a poisonous snake which came out suddenly from the neighboring jungle. Soon after she became insensible, and was brought to the garden hospital, a distance of a mile and and-a-half, being carried by other coolies on *charpai*. I found her quite unconscious, and immediately injected 15 minims of liquor strychnia hydrochlor over the heart. She soon recovered consciousness, and I made incision at the bite on the leg, and burnt it with strong nitric acid. Finding that the patient was going to collapse, I again repeated the strychnia injection in the muscles of her left arm and followed it with a similar dose by the mouth. Since then the case began steadily progressing towards recovery. I did not stop there, but continued administering minim doses of the drug at intervals. In addition I gave her stimulants, and kept her moving to and fro. The woman was all right in the course of four or five hours.—*Indian Medical Record.*

The Association of American Medical Editors.

The annual meeting of the editors' association was held at St. Paul, June 3–5, 1901, the sessions being convened in the library hall of the Ramsey County Medical Society. This was the most successful meeting held for fifteen years, both from point of attendance and the high standard of excellence of the papers presented. Of especial moment was the paper presented by Dr. Burnside Foster, of St. Paul, entitled "Some Thoughts on the Ethics of Journalism," which was discussed by Doctors Lancaster, Gould, Love and others. At the instance of Dr. Foster, a committee consisting of Doctors Simmons, editor of

the Journal of the A. M. A., Gould of American Medicine, and Foster of the St. Paul Medical Journal, was appointed to amend the constitution and by-laws of the association by adding certain rules concerning the nature of the advertising which is to be admitted to the pages of the journals in affiliation with the association. These rules are to be binding on all members, the committee also being advised to suggest such revision of the constitution and by-laws as may be deemed advisable.

Among other papers read were those of Dr. John Punton, entitled "The Relative Value of Medical Advertising;" that of Dr. Dudley S. Reynolds, entitled "Improvements in Medical Education;" Dr. Harold N. Moyer, "Relation of the Medical Editor to Original Articles."

The association adopted resolutions favoring the establishment of a psycho-physiological laboratory in the Department of the Interior at Washington, D. C. It also appointed a committee to draft a resolution requesting the Board of Directors of the Louisiana Purchase Exposition Co., in charge of the St. Louis World's Fair to recognize and commemorate in a suitable manner the great work done in medicine and surgery. The American Medical Journalist was selected as the official journal for publication of papers and proceedings.

The annual dinner of the association was held at the Metropolitan Hotel on the evening of June 3d, President Stone acting as toast-master. The speakers of the evening were Doctors Love, Stone, Moyer, Matthews, Marcy, Fassett, Hall. They confined their remarks to subjects of interest to medical editors, and contributed not a little towards the scientific features of the meeting.

At the session of June 5th, the officers for the ensuing year were elected as follows: President, Dr. Alex. J. Stone, of St. Paul; vice-president, Dr. Burnside Foster, of St. Paul; secretary and treasurer, Dr. O. F. Ball, of St. Louis.

The executive committee appointed for the ensuing year consisted of Doctors Gould, Matthews, Lillie, Fassett, Marcy.

The next meeting will be held at Saratoga Springs, N. Y., in June, 1902.

Thirty-seven Extrauterine Pregnancies.

Stepkowski publishes statistics of 37 cases where Neugebauer operated in Warsaw; 1 case proved fatal. Of the 37 women, 27 were under 30, the youngest was 23, and the eldest 42. In 5 out of the 37 it was first pregnancy that was extrauterine (13.5 per cent.) The ovum lay in the isthmus in 12 cases, in the ampulla in 7, in the middle part of the tube in 2, whilst its site was not defined in the remainining cases. The following important pathological conditions were noted: Endometritis, 13 cases; multiple (sic) torsion of the Fallopian tube, 2; follicular dropsy and cortical oophoritis in no fewer than 11; pelvic peritonitis, 11; cyst of the broad ligament in 2; and lastly, hæmatosalpinx in 2. No fewer than 14 of the 37 women had aborted in the previous pregnancy; 6 had suffered from pelvic inflammation after the previous delivery or abortion. In 3 the previous delivery or abortion. In 3 the previous pregnancy had been gemellar, 8.2 per cent. In 1 the abnormal pregnancy set in during lactation; 1 was twice abnormally pregnant, first in the right tube, and two years later in the left, the pregnancies being consecutive: a second was similarly affected, but not in consecutive pregnancies; in her case, again the right tube was the first to be involved. Abdominal section proved superior to vaginal operation, as it allowed a full view of the parts under manipulation; 19 of the 37 were operated upon from the abdominal side, 18 being colpotomies.—*British Medical Journal.*

A State Laboratory for New York.

A State laboratory is to be established at Albany, N. Y., at once by the State Health Commissioner, Daniel Lewis, under an appropropriation of $20,000, made by the last Legislature. In order to facilitate the prompt commencement of the work contemplated, pending the construction of the new laboratory building, Dr. Lewis has arranged for the State's work to be performed at the Bender Laboratory. The State Laboratory will be in charge of Dr. Blumer, the pathiologist for the State health department. The laboratory is to be utilized in connection with the Legislature's direction so that the State Department of Health shall conduct the work of the manufacturer of tetanus, streptococcus, and diphtheria antitoxine, and to conduct further investigations of serum therapy in tuberculosis, typhoid fever, and kindred diseases.

The Phosphates of Iron, Soda, Lime and Potash, dissolved in an excess of Phosphoric Acid, is a valuable combination to prescribe in Nervous Exhaustion, General Debility, etc. Robinson's Phosphoric Elixir is an elegant solution of these chemicals. (See page vi.)

Combine iodoform and codeine in coughs. It adds calmant and stimulant qualities.

On the External and Internal Employment of Argentamine. *

I have used Argentamine for over two years both externally and internally in numerous cases, and I have found that it not only almost always is an efficient substitute for the nitrate of silver, but in many cases superior to it. Its field is that of all affections of the mucous membranes in which an astringent, antiseptic and antibacterial action is required. Of course the stage of the disease and the amount of inflammation present must be taken into account- I have treated inflammations of the conjunctiva, pharynx, stomach and intestines, urethra, bladder and vagina with solutions of various strengths; and, without going into details, will report my opinions as to its field and efficacy in comparison with similar preparations, the most suitable strengths in which to use it, etc.

In gonorrhœa the dosage was a varying one in accordance with the symptoms and stage of the disease, The method of employment was also various, being sometimes ordinary injections, sometimes by irrigation, and sometimes by instillation by means of the Guyon syringe. I started on the basis of a 10 per cent. Argentamine, corresponding to a 1 per cent. silver nitrate solution. For anterior injections I found 1 : 400 to 1 : 200 solutions most suitable. In acute cases I began with the weaker strength; and my results show that it best filled the indications as to efficacy and absence of irritant effect, I gradually increased the strength of the injection, and found that 1 : 300 was well borne by almost all patients without subjective or objective ill effects. Even 1 : 200 usually caused no irritation of any account. In some cases when this solution was allowed to act for some time, say ten minutes, there was moderate burning and slight increase of the discharge, phenomena that did not appear with the lesser strengths.

Upon the whole Argentamine seemed superior to the nitrate of silver in that it caused the inflammatory symptoms to disappear more rapidly, and the abundant secretion to diminish, became mucoid, and cease more quickly. As a rule the gonococci disappeared earlier.

The ordinary injections were done three or four times a day, being retained five to ten minutes in the urethra each time. In the more chronic cases, and especially in posterior urethritis, stronger solutions were employed; and when the affection was circumscribed in the latter location, installations of 1 : 10 solutions were made with the Guyon syringe. In very many cases this concentration was well borne, and did not irritate. Twenty per cent. instillations, however, were found to be less suitable, and I should not advise their employment. The 10 per cent, concentration is equivalent to a 1 per cent. nitrate of silver solution, and is at least as efficacious, and perhaps more so, than a 2 per cent. solution of the older salt, and causes less irritation and trouble. In general the irrigations caused no irritation at all; and in the isolated cases in which they did, it was very slight in degree.

For urethral irrigation, and in gonorrhœal cystitis, after the termination of the acute symptoms, solutions of 1 : 1000 to 1 : 500 in distilled water were commonly employed. The irrigations were made once a day, and no disturbing by-effects, burning or dysuria, such as are commonly seen with the mildest applications, ever occurred. On the other hand, the therapeutic action of the drug was far superior to that of the older remedies. The results were very excellent, and sometimes brilliant. Combination of ordinary injections with the irrigations sometimes increased their curative effect. Irritation of that sensitive organ, the bladder, rarely occurred; and when it did, in delicate individuals, it was very slight. The method did excellent service in several cases of prostatic disease with chronic vesical catarrh. Irrigation was naturally not employed in fresh cystites; but in recent infectious urethrites they could be used without any trouble at all. In fact in these cases improvement or cure was more rapidly effected than with the ordinary injections. Argentamine was employed with good results in a few cases of gonorrhœal vaginitis and cervicitis. In the former irrigations of Argentamine 1 : 1000 worked very satisfactorily; in the latter, applicati ns of 5 and 10 per cent. strengths were made with good results and without causing much irritation or any other by-effects.

In pharyngeal diseases Argentamine was employed where silver nitrate would formerly have been used, being always found its equivalent, and in man ycases its superior. This latter seemed evident in a case of syphilitic pharyngitis amongst others. 5 to 10 per cent. solutions were used, and were somewhat less unpleasant to the patient than nitrate solutions would have been.

In the ophthalmological field I employed Argentamine in all the suppurative conjunctival diseases in the form of 1 to 2 per cent. instillations three to four times daily,

*By Dr. Rergel, of Inowrazlaw, (Abstracted from Therapeutische Monatshefte, Berlin July, 1900.)

or as a brush application once or twice a day in 5 to 7 per cent. solution. In the great majority of cases I was well pleased with its action. The nitrate of silver does very well in many of these cases; but the new drug possesses the advantage of being usable in relatively weaker concentrations to get the same effect, and the irritative symptoms and subjective difficulties caused by its employment were distinctly less. I administered it in suppurative conjunctival catarrhs, acute follicular catarrhs, acute trachoma, chronic suppurative trachoma and blenorrhœa neonatorum. In almost every case its action was at least equal to that of the lunar caustic; and in the acute follicular catarrhs and trachomas it seemed to influence the swelling and suppuration very favorably and quickly, and without unpleasant irritation. In gonorrhœal conjunctivitis of the new-born I had excellent results in some cases; in others I rather felt safer with the usual 2 per cent. nitrate solutions, and changed to them. Corneal affections, and more especially pannus trachomatosus, were no contraindications to the employment of the Argentamine; on the contrary, they seemed to be favorably influenced hy the applications.

The internal employment of Argentamine soon demonstrated to my satisfaction that there were no unpleasant by-effects connected with this use of the drug. The first case in which I used it per os was that of a phthisical colleague who suffered from attacks of diarrhœa which neither astringents, nor opium, nor combinations of the two could relieve for any length of time. I administered a half per cent watery solution with a little glycerin, giving a tablespoonful every two or three hours. The result was visibly and extremely satisfactory. The six to eight daily diarrhœal stools speedily became reduced to two, the fæces became more consistent, and the appetite increased. There was no complaint of heartburn, colic, or any other unpleasant effects. I was loth, however to attrib ute this brilliant result to the Argenitamine alone, supposing that other factors unknown to me had probably been at work.

I soon had chances, however, to convince myself of the therapeutic efficacy of the drug in other cases in adults, and more especially abundant opportunity to study its effects in the gastro-intestinal affections of childhood. I was, of course, slow to abandon the older and well-tried remedies, calomel, bismuth, etc., for a new preparation. But I reflected that the nitrate of silver still maintains a high place in the treatment of gastro-intestinal affections, and in many cases with justice; and my first good result, and more especially the entire absence of any ill effects, encouraged me to overcome my hesitation. The results, whilst not always especially brilliant. were vety satisfactory in the majority of instances; the remedy being, of course, employed on certain special indications, which will be mentioned later. A very slight burning was the only by effect noticed when the stronger solutions were employed; but this was only temporary, and occurred but in exceptional cases.

I employed Argentamine in entero-colitis after the first severe symptoms passed away, and, of course, in conjunction with a rigorous diet; in intestinal catarrh, in enteritis, in phthisical diarrhœa, and as an injection in catarrh of the large intestine. The dosage and concentration of the drug varied with the age of the patient and the condition of the gastro-intestinal mucous membrane. A teaspoonful to a tablespoonful was administered every two or three hours of a half to one per cent. solution, either plain or with glycerin. Often the one per cent. solution could be taken by the tablespoonful without trouble; in isolated instances it caused slight irritation. With the three-quarter per cent. solution this never occured; and even with the stronger one the symptoms were very slight and transitory. The therapeutic efficacy of the half to three-quarter per cent. solution were, however, quite equal to that of relatively more concentrated silver nitrate ones; indeed in very many cases they were far superior, both as regards their astringent as well as their antibacterial effect.

In the gastro-intestinal catarrhs of children and adults and Argentamine solution of the above strengths could often be employed with affect when other remedies failed. For purley astringent effects, however, we possess other and more suitable drugs. Regulation of the diet, etc , seems iu some cases to make all medication superfluous, or at least only accessory; but the direct influence of the Argentamine could often be plainly seen. The very best results were obtained in enteritis, probably on account of the union of astringent and antiseptic properties in the remedy. In catarrhs of the large intestine repeated irrigations of Argentamine solutions of strengths of 1 : 500 to 1 ; 1000 were made with favorable effects.

One of the latest fads in England is having trained nurses for pet dogs.

Danger to Laity.

Doctors Repudiate Professor Atwater's Theory of Food Value for Alcohol.

TESTIMONY THAT THE TEXT-BOOKS ARE ACCURATE.

The American Medical Association has just held its annual meeting in St. Paul, Minn. During its sessions, the American Medical Temperance Association composed of eminent physicians and teachers in medical colleges, members of the American Medical Association, always holds one or more meetings for the special purpose of promoting scientific study and investigation into the action of alcohol in health and disease. The meeting this year shows a great advance in the scientific study of alcohol and its action on the body. In the ten years of its existence, its membership has grown to over two hundred, and the number of papers and discussions all of a scientific and technical character are increasing, so that literally, this is the most authoritative organization studying the alcoholic question in this country. Of the ten papers read at the St. Paul meeting, three of them discussed Professor Atwater's experiments and conclusions, then passed the following resolutions as the unanimous opinion of the Association.

"Whereas, The American Medical Temperance Association, the members of which are physicians and medical teachers who have devoted years to the study of alchol and its effects, and who are conversant with the work done by scientific men the world over to determine the effects of alcohol when given in any quantity, have noted the teaching of Professor W. O. Atwater, of Wesleyan University, upon the food and medical value of alcohol as set forth by him in the pages of the influential lay press be it

"Resolved, That this Association utterly repudiates the pro-alcoholic doctrine of the said Professor W. O. Atwater as being contrary to the evidence deduced by scientific experimentation, and that his conclusions are unwarranted by the evidence resulting from his own experiments. Be if further

"Resolved, That this Association regards the teaching of Profossor W. O. Atwater, as erroneous, and a source of danger to the laity insomuch as such teaching contributes towards the increased consumption of alcohol beverages by giving supposed reason for their safe use."

(Signed)

N. S. Davis, M. D.,
President, Chicago, Ill.
T. D. Crothers, M. D.,
Secretary, Hartford, Conn.

Two other papers pointed out the evils from the use of cigarettes and tobacco on neurotics and young persons. One paper critically reviewed the school-book teachings on alcohol, sustaining their claim to scientific accuracy in nearly all the books used.

The address of both the President and vice-President described the folly of efforts to check disease and degeneracy by ignoring alcohol as one of the active causes, also the conflict of experience with theory and tradition. The other papers read discussed the causes of the popularity of alcohol as a beverage, and its danger in high altitudes; also the substitutes for its use in medicine.

The value and reliability of these papers is evident from the fact that eight of the ten authors are active or emeritus professors in medical colleges. Four of them are medical journalists, two of whom are in active practice.

Intestinal Diseases of Children. *

Dentition, in my opinion, is only incidental to the gastro-intestinal disturbances, known under the general head of cholera infantum. True it is that children are highly susceptible to reflex disturbances, prompted by irritation in the gums at the teething period. Any constant irritation, however, may produce the same reflex disturbances. Cholera infantum coincidental with teething, is apt to be regarded as a result of this physiological process by the thoughtless observer. We must differentiate between a coincidence and a cause. We must differentiate between a coincidence and a contributing cause. Cholera infantum may take place at any season of the year; so may the process of teething. These two conditions frequently take place simultaneously. Cholera infantum, however, is far more likely to take place in the summer—in the central and southern sections in August and September—than in any other season of the year. Indiscretions in diet are the exciting. When teething is coincidental we can more readily understand the influence of indiscretion than at a later deriod. The mere fact of dentition can be responsible only for certain reflex disturbances; but the cause of dentition is the necessity for a change in the child's diet. The child must be supplied with food different from mother's milk, otherwise, why the advent of teeth? This necessity is recognized intuitively by the mother, who not knowing how to meet the

* Geo. Howard Thompson, M. D., Professor Materia Medica and Experimental Medicine of Physicians and Surgeons.

indication physiologically, is only too apt to kill the child with mistaken kindness. The child gets bread to bite, which the child's gastro-intestinal apparatus is not ready to dispose of properly. It ferments and sets up a gastro-intestinal irritation, nausea, vomiting and purging results, and finally the doctor is called.

This summer I have had a large number of cases of cholera infantum, subacute gastro-intestinal indigestion and marasmus. Probably my best results were derived from the following line of treatment:

Baby was given Podaphyllin, one-fortieth of a grain, or calomel, one-tenth of a grain, until the passages became distinctly bilious. Then an intestinal antiseptic sedative and astringent consisting of:

℞ Bismuth subcarbonatis, Dr. i
Glyco-Thymoline (Kress) fl. oz. ss
Misturæ Cretæ, q. s. ad. fl. oz. iij

M. Sig. Shake the bottle and take a teaspoonful every three hours.

It is always a good idea to give the baby an enema of a pint of warm water, in which is an ounce of Glyco-Thymoline at the commencement of treatment, in order that the colon may be relieved as rapidly as possible of its fermenting and decomposing contents, and the lining meet the antiseptic and healing application as soon as possible. Daily enemata of the above solution are frequently advisable.

This summer I have had fewer unfortunate terminations in my cases of cholera infantum than in previous years, and I attribute my good fortune largely to the fact that, at the instigation of Dr. A. E. Chatfield, of Cleveland, Ohio, I have added this non-irritating antiseptic, Glyco-Thymoline to my internal medication in inflammatory diseases of the gas-tro-intestinal tract.

It has proven to have these advantages: It is antiseptic; it is non-toxic in the dose given; it is non-irritant; it is healing. It is about the only antiseptic that can be safely given to children.

Hysterical Mastolditis.

Attention has been recently drawn to the fact that in a certain number of patients complaining of intensely painful mastoiditis careful examination has failed to disclose the slightest organic lesion. It has been noted that the pain in these instances always appeared suddenly and was acute from the first, being distributed over the entire mastoid region with no especially sensitive points. The absence of fever and prostration may be looked upon as a sign pointing to the possibility of the hysterical nature of the affection, and in one patient the true nature of the condition was diagnosed by the sudden transference of the pain to the opposite mastoid region. The advisability, therefore, of entertaining the suggestion of an obscure manifestation of hysteria should be borne in mind when intense pain in the mastoid region of an indeterminate and indefinite character is complained of in a subject known to suffer from hysteria with or without some slight ailment of the ear.—*Medical Press and Circular.*

A New Method of Distinguishing Human Blood from that of Animals.

C. Tarchetti (Gazz. degli Osped.. May 19th, 1901) describes a new procedure for this purpose: If into an animal (A) the blood of a different species (B) is injected, then after a certain time the blood of the animal (A) is found to be toxic towards blood of the species (B). Thus, by repeated injections into rabbits of human blood—10 c.cm. on four or five occasions at intervals of about a week—Uhlenhuth and Washerman got from the blood of the rabbit a serum wnich exhibits hæmotoxic powers to human blood, not only in a fresh state, but also when dried and redissolved in normal saline solution. Ape's blood was the only other one which behaved like human blood. Wassermann and Schultze proceed thus: Dissolve the spot of blood to be examined in a little normal saline solution; filter; place 4 or 5 c.cm. in two small test tubes, to one of which (*a*) add 0.5 c.cm. of rabbit's blood made hæmotoxic as above; to the other (*b*) add 0.5 c.cm. of normal rabbitt's blood. A third control tube (*c*) may be made with 4 or 5 c.cm. of solution of the blood of any animal save ape or man in distilled water. Place the solutions in a thermometer at 37 deg. C.: if the spot of blood be human, in an hour's time the tube (*a*) will show a turbidity or a floculent precipitate, while (*b*) and (*c*) will be perfectly limpid. Tarchetti carried out similar experiments with human blood and that of animals, both fresh and dried, for more than two months on cloth, wool, and knife blades, and found the method reliable. The reaction occurs almost as well at the air temperature as at 37 deg. C. The solutions must be absolutely clear to begin with, and he finds distilled water better for this purpose than normal saline fluid, for it brings all the hæmoglobin out of the corpuscles. He has found that the diagnosis can be at once made with the greatest certainty in a hanging drop under the microscope; a slight uniform precipitate is at once formed, and in a few minutes is seen as islets

united in a reticulate pattern much resembling the arrangement of Eberth's bacillus agglutinated by typhoid serum. The same thing is observed in filtered aqueous solutions of dried blood. It is only after a long time (twelve to twenty-four hours) that a similar appearance is seen in blood of other animals.

Specialism in Nursing.

In spite of the great advances in nursing of the last few years, it may seem premature to speak of the necessity of specialism in nursing. Anyone, however, who has encountered the great difficulties attendant on the care particularly of patients with nervous disorders, or whose ailments are complicated by an unusually sensitive nervous system, must appreciate the necessity of a nurse of not only remarkable endowments but of especial experience with similar cases. It goes without saying that a good surgical nurse must have been especially trained in surgical knowledge. The training-schools connected with our large hospitals give excellent facilities to their undergraduates in both medical and surgical cases. The young graduate nurse, however, like the young graduate physician, is often trained to hospital methods, and lacks the finer adjustments which come from dealing with people in better average circumstances and of more delicate nervous organization than are found in most hospital patients. The obstetric and gynecologic nurse should have much greater experience than is furnished in most of our training-schools, in view of the fact, especially in obstetric work, that accidents are often so sudden and attended by so dire results. The effect of the mind on the body in all classes of disease is such that nurses should appreciate much more keenly than they do the importance of their mental attitude toward their patients. The ruinous results of making light of or deriding symptoms distressing to the patient, of treating intelligent patients as if they were imbeciles, and unintelligent ones as if they were machines and not sentient beings, are too often seen; and can be avoided only by greater care in the selection and training of nurses and the selecting by nurses of the fields of work for which they are best suited by nature and training.—*Cleveland Journal of Medicine.*

The Morphia Habit in Paris.

In Paris morphine is rapidly taking the place of absinthe as a stimulant, says a writer in the "Peoples Friend." Not long ago there was a splendid mansion in one of the fashionable quarters of Paris, which was occupied by a Polish princess bearing an illustrious name. She was a morphinomaniac, and not only used the drug herself but also taught many of her visitors the evil custom. It was no uncommon thing on her reception days to find on the devans and sofas in her drawing-room ladies of the highest rank stretched helplessly, like so many corpses, under the influence of morphia. So notorious did this become that the house was known as "La Morgue's from its similarity in appearance to the well-known mortuary at Paris. "The ravages made by morphia in the moral character are hardly less startling than the physical decay which it produces. One French writer declares that "Morphine atrophies the faculties of its devotees, deprives them of their free will and is so pernicious that a woman under its influence loses all moral sense. One of its commonest symptoms is the development of kleptomania, but more terrible crimes than theft are committed under its influence, and some of the most revolting atrocities of recent times have been due to it. The wretch Auberl, who assassinated young Delaeff that he might rob him of some postage-stamps, and then packed the body in a portmanteau, intending to throw it into the sea, was a morphinomaniac."—*Indian Faucet.*

Urethrocele.

Pompe Van Meerdervoort (Rev. de Gynec et de Chir. Abd., Janutry-February, 1901) publishes some interesting general observations on this condition. His own patient was troubled with dysuria after her confinement one year before he saw her. Constant desire to micturate soon developed, and she occasionally noticed that a little tumor appeared at the vulva, on such occasions micturition was less painful than when it did not appear. There was a slight cystocele, and on pressing the interior vaginal wall a swelling of the size of a pigeon's egg could be felt in the urethrovaginal septum. It was invested with vaginal mucous membrane, and was elastic and dense. On passing the catheter along the superior wall of the urethra, it entered the bladder without obstruction and healthy urine escaped. On guiding it along the lower or posterior wall the catheter entered a sac-like cavity one inch above the urethra; the free end of the instrument could then be plainly felt through the vaginal walls, a turbid sanious fluid came away through the catheter. Van Meerdervoot removed an oval piece of the anterior vaginal wall, then passed a sound

into the urethra, and dissected away the urethral diverticulum. The thick walls of the urethra were united with catgut threads, the vaginal wound with silk. A catheter was retained for several days. Most of the vaginal sutures came away spontaneously, the remainder were removed at the end of a fortnight. — *British Medical Journal.*

The Present Status of Plague in San Francisco.

We have, in some of our previous issues, referred editorially to the plague situation in San Francisco. In these editorials we have endeavored to point out the importance of the recognition of the existence of plague in this country, and to urge the use of such measures of removal and prevention as circumstances warrant. Although the existence of plague was established beyond a doubt by the local health authorities of San Francisco, and their conclusions were verified by all of the leading pathologists and bacteriologists of that city, yet in the face of doubts thrown upon their conclusions by the hostile State Board of Health and State officials occupying high places, the appointment of a national commission for the purpose of final judgement seemed entirely justifiable. Doubtless very few of the physicians of the East who have read reports of the plague situation in San Francisco, in the newspapers and medical journals, were surprised at the report of the National Commission. They were convinced that the plague had prevailed in the Chinese quarter for at least a year.— *Philadelphia Medical Journal.*

Symptomatology of Primary Cancer of the Head of the Pancreas.

F. Schupfer (Rif. Med., April 27th, 29th 30th, and May 2nd, 1891) relates 7 cases, 6 men and 1 woman, aged from 33 to 70. He notes that the 3 youngest cases—aged 33, 48, and 34— were all heavy drinkers, and suggests this as an element in the etiology. The symptoms have been too definitely described, and many cases are atypical. (1) Subjective symptoms are often wanting altogether, and even physical weakness may not appear till late. (2) The liver was enlarged in 4 cases, in one of which there was marked diminution in the space of four days. (3) The gall bladder is always very swollen, usually tender, and often displaced outwards. The swelling occurred, contrary to Hanot's hypothesis, even when there was infective inflammatory trouble and thickening of the walls. (4) Jaundice came on suddenly—which is exceptional—in 2 cases, in each instance with severe colicky pains. (In the first case this was due to the onset of fibrous peritonitis, in the second there was suppurative angiocolitis.) Jaundice was absent only in one case (not observed to the end), and slight in another. (5) The tumour was palpable in 3 cases, and in one moved during inspiration, owing probably to adhesions to the stomach. (6) Cachexia was profound and rapid, (7) Lymphatic glands; the affection of the supraclavicular glands to which some attach so much importance, was only present in 2 cases; the inguinal glands were more often affected. (8) Ascites was scarcely over present, save during the last few days of life, (9) Pain was as a rule not severe. (10) Temperature; fever occurred in 3 cases, 2 due to infective angiocolitis and slight in degree in the third. Save in 2 cases, the subnormal temperatures on which emphasis has been laid did not occur. (11) Urine; only in 2 cases, both of which were alcoholic, did albumen occur. The author discusses very fully the various theories as the presence and disappearance of glycosuria in these cases. In his series of cases it only occurred once, and there disappeared very rapidly. He attributes it in all cases to the tumour, and explains the degree of it and its duration as depending on the degree of alternation of the gland substance—either by the tumour itself or by secondary changes. As a rule glycosuria disappears when jaundice set in; moreover, even in true diabetes, the sugar may disappear from the urine before death. These two facts, with the consideration that the patients usually come under observation when jaundiced, and when profounnly cachectic, will explain the transitory nature of the glycosuria.— *Britsh Medical Journal.*

A Study of the Food Consumed and Digested by Four Members of the Harvard University Boat Crew in June, 1900.*

The four men ate on the average 154 grammes of protein, 139 grammes of fat, and 473 grammes of carbohydrates, with a fuel value of 3,925 calories to a man each day. It appears that the four men ate about as much as the Harvard and Yale crews in 1898, and that their food had about fifty per cent. more protein and sixteen per cent. more energy than that of the men at ordinary occupations in the United States whose dietaries have been studied. The four athletes, on the average, digested their food just about as completely

*By W. O. Atwater and F. G. Benedict.

as the average man does. There were however, such marked differences in the amount and composition of the fæces of the different men as would imply a wide diversity in their capacity to digest their food. No special studies were made of the composition of the fæces. Comparisons of the urea and uric acid in the urine failed to yield any such results as to warrant conclusions regarding the effect of severe muscular exercise upon their amounts- A notable feature was found in the fact that the nitrogen excreted by the kidneys and intestines was considerably less in amount than the total nitrogen of the food, indicating that there was a considerable storage of nitrogen in the body. The amount was such as to correspond to an average of not far from twenty-four grammes of protein daily, if no allowance is made for the excretion of nitrogenous compounds in perspiration through the skin. This gain is so noticeable as to suggest the queries whether men who are staring nitrogen to such an extent are in the best physical condition, and whether the amount of protein in the diet was the most appropriate for the purpose. Further and more detailed investigation are needed to show what diet is best for men under such severe muscular strain as that of oarsmen in training for races.—*New York Medical Journal.*

Insects as Factors in the Conveyance of Disease

Surgeon General Wyman, of the United States Marine Hospital Service, has recently issue a circular directing the attention of the medical officers of that service to the great importance of this subject. It has seemed to us (although we may be mistaken), that the marine and military authorities pay more attention to this subject than do municipal and other civil functionaries. We know that right here in Philadelphia the "plague of flies" is not well combated in some of our large hospitals. To go through some of our wards on a mid-summer's day is to be harrowed not more by the vision of disease than by the all-pervading curse of insects. Flies are not the only sinners. Fleas, bed-bugs and mosquitoes do their share in the general bedevilment of the sick and injured.

This is no longer a mere question of comfort. It is one even of life and death. As Dr. Wyman says, there is no doubt as to the relation of the mosquito to malaria and filariasis. Plague, according to Simon, is transmitted from the rat to man by the flea. Typhoid fever and cholera are possibly conveyed by flies which become contaminated by the excreta. Again, yellow fever, according to some, but not all, observers, is transmitted by the mosquito. The best way to kill flies and mosquitoes is by sulphur fumigation. Mosquitoes should be prevented from breeding by draining or covering all collections of standing water, or by covering the surface with petroleum. In this city of Philadelphia fly-screens and mosquito-netting should be used universally. No hospital should be considered well equipped that leaves doors and windows unguarded. Excreta should be kept away from flies.—*Philadelphia Medical Journal.*

Laparotomy for Perforative Peritonitis in Typhoid.

Cardi (Clin. Mod., An. 7, N. 17) reports the case of a child, aged 13, admitted December 26th, 1900, suffering from typhoid which ended on January 17th. On February 4th a relapse occurred and went on regularly until February 16th, when the temperature suddenly dropped to 37 deg. C. and severe abdominal pain set in; the abdomen did not swell, but was extremely tender; there was no vomiting or hiccough. Perforative peritonitis was suspected. On February 17th the splenic dulness had disappeared and the hepathic was much reduced, and over the whole abdomen a vesicular murmur could be heard. For various reasons laparotomy could not be performed then, but was done next day. The pulse was 130, thready, and the temperature 38.6 deg. at the time of operation. Slight chloro-narcosis was induced, and the abdomen opened; turbid fluid came out, general peritonitis was found, and a perforation about 10 cm. above the ileo-cæcal valve. This was sewn up, and the rest of the intestine examined for further perforation. The abdominal wound was partially sewn up, and a gauze drain inserted. The next day the fever ceased and did not recur and six weeks later the child was practically well.—*British Medical Journal.*

Lay Manufacturers and Physicians.

A protest is needed, and a strong one, against the irrational and unjust prejudice is shown by some physicians against manufacturers of pharmaceutic and other products used by the medical profession, and against their advertisements in medical journals. Our experience is that many lay manufacturers are as a rule quite as honorable and as good citizens, that they exhibit indeed quite as good a professional spirit as do many physicians. There are

bad men in both callings. Self-laudation through dogmatic and indiscriminate abuse of the manufacturers is both stupid and silly. In the first place we should sweep and clean our own house. If manufacturers are wicked it is even worse for physicians to use the bad articles made by them. They are under no compulsion to do so, and our wrath might very fittingly be expended upon those of our own household. And in reference to advertisements in medical journals, it may also be suggested that when they are of good character and made by reputable firms, criticism by the profession is hardly just except when 10,000 physicians shall first agree to pay $10 a year for a weekly journal without advertisements.—*American Medicine.*

President Butler on Death.

President Scot Butler, in his baccalaureate service at Butler College, Sunbay, June 16, in memory of Joseph Irwin Sweeney and Daniel Warren Sigafoos, of the class of 1901, had this to say of death —a mournful note, but brave, truthful and courageous, like its soldier author;

"For the immorality of fame to our human longing is but mockery and death is death. And even if we could forget grosser terrors that affright the soul, death means this; it means renunciation of the world. It means the end of life and life's familiar happenings; the end of morning's bloom and noontide's splendor, and sunsets painted on the western sky; the end of daily toil itself grown welcome; the end of going forth into the world to meet the recognizing hail and kindly looks; the end of evening's yellow, glowing lamp that casts radiance on our little world of books; the end of that dear couch whereon we had been wont to lay the wearied frame and sink in dreams; the end of hope and fear, of love and hate, of victory and defeat —that is death.

"And yet, even on the low plane of our animalism there are stronger thoughts than these, and better, and these are consolations even of death. Stripped of strength, deprived of hope, driven to bay, man may find stern joy in brave death. There is nobility in that, even though it be nothing more than what we call brute courage. But such courage argues more for man than for brute.

"And death is not so hard. It were indeed a simple thing to undergo that physical change that we call death—to breathe out life and then be still. It means a holding of the hands, a closing of the eyes and entering into rest. We shrink back now and dread the change, and look with longing on the treasures we have made our own; but when the inevitable hour has come, the things that please us now become as nothing—they sink into insignificance. And nature is kind. The pain that kills is not so cruel as we think. There comes a time when sense grows dull. Down into waters deep in semi-consciousness we sink, beginning to know what freedom is from burden and from pain—deeper, wide eyes upturned to lessening light—deeper and more dim until we rest upon the very bottom of the world—darkness then and silence and no disturbing thing forever more —and that is death. But death is more than this, just as life is more than anything I have told. Of old, men had a god whose power to them was manifest in the roots of the tree searching deep into the damp earth for support and sustenance, but whose realms was the world of light above. So it is with our human nature. We are rooted in the ground, but our heads are lifted up. And as we have risen the world has grown brighter. There has come into our lives a sense of companionship and an idea of continuance."—*Indiana Medical Journal.*

Occlusion of Intestinal Arteries.

Schnitzler (Wien. med. Woch., Narch 16th, 1001) states that the symptoms usually ascribed to embolism or thrombosis of the mensenteric arteries are either sudden and violent colic follow by hæmorrhage diarræa or those of acute intestinal obstruction. In either case the sudden onset of the symptoms is characteristic. The following case presents an unusual history and course. A woman, aged 55, who had had pluerisy, iritis, and glaucoma, had been constipated for five years. For four years there had been attacks of colicky pain in the gastric and hepatic regions, occuring after food and often accompanied by vomiting. For six months the pain had been practically continuous, was very violent, and was unrelieved by large doses of morphine. The bowels never acted without enemata or castor oil. All treatment failed, including several courses at Carlsbad. There had been several attacks of jaundice. The abdomen was soft and no peristaltic movements were visible. Cholelithiasis and chronic intestinal obstruction, probably from adhesions between the gall bladder and intestines, were diagnosed. Laparotomy was performed on April 15th, and twelve small calculi were removed from the gall bladder, which was drained. Some loose adhesions between it and the

intestines were separated, and though a thorough search was made for a further cause of pain none was found. The operation had no influence on the pain. On May 26th a soft black motion was passed for the first and only time spontaneously, and death followed on May 27 from asthenia. At the necropsy an infarct of the jejunum, ileum, and ascending colon was found with multiple ulcers and hæmorrhages of the mucous membrane. There were also peritoneal hæmorrhages with fibrinous peritonitis, which had matted the intestines together. The peritoneal cavity contained about 17 ounces of blood and clots. There were parenchymatous hæmorrhages in the pancreas, and chronic endarteritis of the aorta. The origin of the superior and inferior mesenteric arteries were occluded by a fibrous clot close to their origin. The peripheral branches were patent. It was surprising that, though the thrombosis had evidently existed for at least some months, and the intestinal ulceration was also of some standing, the haemorrhagic infaction which usually follows a sudden oblietration of an artery was recent. The explanation is probably that, as Litten has shown, the mesenteric arteries, though not anatomically end arteries, behave as such. The normal blood presure is insuficient to drive blood into the collateral branches if the mesenteric arteries are occluded suddenly, but, if this takes place gradually, a collateral circulation may become established, and no harm result to the intestines. In the writer's case a collateral circulation must have formed betweeen the pancreactico-duodenalis and the inferior haemorrhoidal arteries. The intestinal ulcers were probably due to the circulation having been in places insufficient. As the heart gradually failed, a point was reached at which the collateral circulation could not be maintained. The result was a heamorrhage infaction of the intestine, which occurred the day before death. None of the usual symptoms were, however, present. There were no vomiting, no pyrexia, and no symptoms of peritonitis, probably owing to the exhausted condition of the patient. The single soft black stool, passed after months of constipation, was the only sign that a change had occured in the condition of the intestinal tract.—*British Medical Journal.*

The Backward Position of the Uterus.

A welcome tendency in gynæcological practice is noticable in the direction of attaching less and less importance to the series of conditions which may be grouped as "displacements" of the uterus. Exaggerated views were for a long time held regarding the effect which may be produced by any deviation from the average in the angle which the body of the uterus makes with the neck. A diminution of 15 degrees in this usually very obtuse angle was viewed as a matter of prime importance, and vast amount of ingenuity was expended in the attempt to compel the uterus to adjust itself to the plane which the gynæcologist had in mind for it. Similarly the relation of the uterine axis to the axis of the pelvis was regarded as of equal importance, and cases in which the usual relation was not observed was regarded as a "displacement," anterior, posterior, or lateral. Anterior displacements are now thoroughly discredited, and the instrumental and operative methods of treating them are well nigh obsolete. The same can however, scarcely be said of backward displacements. Instrument makers say that the demand for Hodge pessariesa is well maintained and the popularity of operations for anterior fixation of the uterus appears to be on the increase. A recent paper by Schroeder, in the Zeitschrift fur Geburtshilfe und Gynakologie, on the frequency of the backward position of the uterus, therefore deserves careful attention. Schroeder has examined the position of the uterus in 411 cases, partly in the Frauenklinik and partly in the Medicinische Poliklinik at Konigsberg. He divided his cases into two groups 303 cases with no pelvic symptoms, cases which were mostly under treatment for other conditions; and 119 cases with pelvic symptoms. Of the 303 cases with no pelvic symptoms, he found that in 21.07 the uterus was definitely "displaced" backwards, the angle of flexion varying. Of the 119 cases with pelvic symptoms, in 36.11 per cent. the backward displacement was present. Further, 98 out of the 303 persons with no pelvic symptoms were presumptively healthy persons, and had no complaint at all; yet 23.66 per cent. of these showed a badkward "displacement" of the uterus. Great care appears to have been exercised in determining the position of the uterus, an anæsthetic being employed in any case where doubt remained after the usual examination. Further interesting results are obtained by a classification of the cases into groups according to their sexual condition. Thus of the virgins examined, 40 per cent. had backward displacements, married nulliparæ 28.57 per cent. and parous women 25.72 per cent. The incidence of backward displacement thus appears to be greatest among women who have borne no children, and least among those who have; its fre-

quency in the virgin is both striking and unexpected. Schroeder's results will no doubt be checked by further observations on the same lines. In the meantime it must be said that his results give powerful support to the views of those teachers who regard "displacements" uncomplicated by the presence of other lesions, as natural conditions not requiring treatment.—*British Medical Journal.*

The Death-Rate at Various Ages.

A big work has just been completed by an Institute of Actuaries and the Faculty of Actuaries in Scotland. They have collected from the principal insurance office the particulars relating to all the persons whose names have been on the books of the companies during the thirty years from 1863 to 1893; and from these data have ascertained what have been the death-rates at every age among the various sections of the lives. The object of such an investigation is, of course, to obtain for assurance purposes as accurate and through a guide as possible in the calculation of rates of premium, the price of annuities, and the periodical estimates of liabilities. Hither to a table based in records relating to persons asssured before 1869 has been employed, but the fact that this standard of mortality includes the early years of the century, when assurance and sanitary and medical science were in their infancy, has long been considered sufficient reason for the adoption of a modern standard. The extent of the investigation can be grasped when it is stated that 793490 assured persons came under review. Comparing the acceptation of life at various ages, we find that among assurances affected during the period, participate in the profits of the companies, there is a very marked increase in the longevity of the lives above that of statistics previously employed. The results as regards annuitants were published last year. Before the weighty results are available for practical use by insurance companies, certain technical processes have to be applied and a vast number of monetary tables calculated; but it cannot be long before the new standard is adopted.—*The Indian Lancet.*

Rockfeller's Gift.

It was but a short time ago that we pointed out that there was no direction in which the superfluous wealth of philanthropic men could be so well bestowed as in providing for scientific research, Mr. John D. Rockfeller's gift of two hundred thousand dollars for the establishment of an Institute of Medical Research is probably the wisest and best manner of disposing of a princely sum that has ever been devised. The arduous and unremunerative work of the experimenter in medico-surgical science, nowadays, can only be seen at its best when, secure from the carking cares of bread-winning, he may devote all his efforts to his labors. The worker must, however, receive more than a pittance large enough for him to live upon, for he is compelled to use complicated and expensive apparatus and chemicals. Our science has so far advanced that we feel we are, at the beginning of this century, upon the threshold of discoveries that may even dwarf those that have gone before, great as they have been. We feel certain that the gift of a few millions to the cause of labortory investigations will prove an investment that may at any time result in interest so noble and grand that it will be a hundred fold reward to those who have been the means of producing it. Cancer, consumption, syphlis and a host of other scourges may be among those which the science of the next few years may learn to hold in check, and we honestly believe that a search for the means of curing a fatal and widespread disease is of greater practical value, of more human interest, than the search after the North Pole, upon which so many millions and so many lives have been spent —*International Journal of Surgery.*

The Blood of the Newborn.

Varaldo, F. has made observations on the histological and physical characters of the blood of the umbilical vein as compared with that of the umbilical arteries of the infant at the moment of birth. By a method differing a little from those previously employed by investigators, he obtained some c.cms. of blood from the arteries of the umbilical cord and some from the vein. He found that the blood of the vein was richer in leucocytes than that of the arteries, but there was no constant difference between the number of the red cells. The blood of the vein contained more hæmoglobin than that of the arteries, but its density was less. Further, it was found that the leucocytes of both the vein and arteries contained an iodophilic substance (as shown by Ehrlich's reaction), and that the leucocytes of the vein contained it in greater amount. The possible bearing of these observations upon the question of the nutrition of the fœtus is that they seem to show that leucocytes coming from the placenta (and from the maternal circulation) are arrested in the

fœtal tissues, and that consequently special substances which they contain (iodophilic granules, glycogen?) are also given to the tissues. There are other differences between the blood of the vein and of the arteries, so that we are justified in concluding that there is a dissimilarity of a complex nature. The mothers of the infants were quite healthy and the pregnancies uneventful.—*British Medical Journal.*

The Evil Effects of Tobacco.

That tobacco is a poison no one attempts to deny, its poisonous effects being universally manifested in the beginner's attempt to bring his system into a state of tolerance to it. The deathly sickness produced by the initial dose of tobacco is all the evidence that is necessary to demonstrate conclusively that it is a virulent poison, and that the human organism is not at all in sympathy with cultivating its acquaintance. In the majority of instances it requires a great deal of courage and stick-to-it-iveness on the part of the beginner to accustom himself to its poisonous influence, and, were it not for the fact that others have succeeded, many would undoubtedly give up in despair.

Tolerance is soon established, however, and the felicity obtained by its use soon causes the individual to forget his early experiences. Sooner or later evidences of faulty nutrition, which may be manifested in a variety of ways, make their appearance, and, if a careful study into the etiology of these conditions is made, a very large percentage of the cases will be found to have their origin in the use of tobacco, alcohol, tea, coffee, and other anti-nutritive substances.

Dr. I. N. Love, in an address on Nutrition and Stimulation (read before the Mississippi Valley Medical Association, at Asheville, N. C., October, 1900, and appearing in the March 2d number of The Journal of the American Medical Association), summarizes his views with reference to the use of tobacco as follows:

"1. Smoking is more harmful than chewing, for the reason that the nervous system is not only more injuriously affected, but the catarrhal disturbances of the air-passages render the smoker more liable to dangerous and fatal diseases of the air-passages.

"2. The excessive smoker is not only more liable to pneumonia, la grippe, tuberculosis, laryngeal and pulmonary, as the sensitive mucous surface and the bankrupted nervous system present a double invitation at all times, but fatal results are more apt to occur. Every case of laryngeal tuberculosis coming under my observation for several years has presented a history of the victim's being a smoker, in the majority of instances to excess.

"3. Heart failure is a frequent complication, and is serious with excessive smokers.

"4. Cigarette smoking is worse than either the cigar or the pipe, but only for the reason that, the cigarettes being milder tobacco, the smoker universally inhales the tobacco fumes; and when we realize what are the component parts of tobacco smoke and how direct are the routes from the vesicles of the lungs into the blood current, we can appreciate the ill effect.

"5. Inveighing against the cigarrette on the ground that the paper is poisonous and the tobacco drugged, mixed with opium, Indian hemp, etc., is all wrong, as the cigarette, being a milder tobacco, perfectly pure, and the paper unobjectionable, if smoked without inhaling and in a temperate way, is to be preferred.

"6. The cigarette smoker nearly always inhales the smoke, and becoming habituated to this quick toxic action, he will not smoke without inhaling, whether he uses the cigarette, the cigar, or the pipe, for the same reason that the morphine habitue, accustomed to the hypodermic method, will not be satisfied with the drug through the mouth, both victims want quick action.

"7. Children who use tobacco before reaching maturity have their growth interrupted, as nothing more definitely interferes with the equilibrium of tissue building, digestion, assimilation, elimination, and metabolism, than tobacco, and for these reasons its use favors gouty diseases, atheromatous degeneration, premature senility and decay. The excessive users of tobacco are crippled in their general equipment, and are in no form to wrestle successfully with any disease.

"8. He who smokes cigarettes to excess, or uses tobacco in any form to excess, is in danger of becoming an alcoholic, but in even greater danger of becoming a drugger, as tobacco is so closely allied to opium and Indian hemp. In a general way, one excess invites another, as the will power becomes lessened.

"9. Nothing is so apt to bankrupt the sexual equipment as tobacco, unless it be opium, as it stands to reason that a cerebrospinal paralyzant must obtund sexual desire and power.

"10. The numerous mental wrecks, youths who have come under my care during the past ten years, whose lives were failures, or who fill suicides' graves, impress me that to-day tobacco stands as the gravest danger confronting the new century, and

the medical profession has a fearful responsibility in educating young men and their parents to appreciate this danger.

"The business world is, I am glad to see, undertaking the solution of the tobacco problem, the same as it has that of alcohol, in that it is declining to employ cigarette fiends as well as moderate or excessive drinkers.

"I am firm in the view that the medical profession must study calmly, tolerantly, temperately, the problems related to stimulants of all kinds, but tobacco and alcohol in particular, and they put themselves in best form for doing the best work along these lines and wielding their greatest influence for good, by themselves being exemplars of temperance, self-restraint, self-denial, and correct living."

The Parasitic Theorirs of Cancer.

Borrel (Ann. de l'Inst. Pasteur, February 25th, 1801) criticises the theories which have described cancer on the one hand to the action of sporozoa and coccidia and on the other to that of certain yeasts. Taking the histological observations of Sawtchenko as typical of those ascribing a parasitic nature to the cell inclusion, he compares them with researches made by himself on the testicle of the guinea-pig. In this organ the cells concerned in the formation of spermatozoa exhibit at an early stage in the process an attraction sphere or archoplasm which has characters identical with those of the cell inclusion in the epithelial cells of cancer. This archoplasmic sphere encloses one or more centrosomes, which, at first dividing and later fusing, eventually from the head of the spermatozoon. Analogous bodies have been described by other authors in the ovules of the young guinea-pig, and in the cells of the bone marrow of the rabbit; in the former thay are so-called vitelline bodies. They appear to have relation to the phenomena of special secretion of the different cells. Coloured by magento and picro-indigo-carmine the attraction sphere is blue and the contained centrosomes are red, and the whole is surrounded by an area of varuolisation. Borrel maintains that the appearance is identical with that of the cell inclusions of cancer and the coloured plates which illustrate the article strongly support the opinion. With regard to the blastomycetic theory of the origin of the disease, the author considers that the opinion is not founded on a precses study of histological characters, and that there has been a tendency to range everything that is round and possesses a capsule among the blastomycetes. He also considers that the yeasts isolated by culture are probably contaminations, and that the results hitherto obtained by inoculation are inconclusive.—*British Medical Journal.*

The Mouth in Disease.

In illness where sordes and mucus accumulate rapidly, and where the tongue and lips are parched and stiff, attention is needed every hour, says the Southern California Practitioner. The mouth should be kept moist, and the same treatment carried out through the night as during the day. Boracic acid solution, lemon juice, glycerine and distilled water are all refreshing, and soften the tissues. Where the lips are chapped or fissures appear, a lubricant of cold cream or sterilized vaseline should be applied. Where the gums are spongy or soft, and bleed readily, a few drops of tincture of myrrh added to pure water will help to harden them. Small squares of old linen or soft gauze should be used instead of a brush where one is ill or weak. These should be immediately burned after use. Every part of the mouth should be cleansed —behind the wisdom teeth, the roof of the mouth and under the tongue. Lemon juice and water will remove the fur from a thickly coated tongue. Where the teeth are sensitive the water should be slightly warm.—*Medical Journal.*

Common Sense.

If a little more common sense were infused into some of our great reformatory movements, looking to the highest good, which have alread accomplished so much, the progress would be more rapid and the results much more satisfactory. It will be remembered, at a recent date, through the efforts of the Women's Christian Temperance Union, whose efforts in legitimate lines have been crowned with abundant success, the soldiers' canteen was abolished by act of Congress. An immense wave of emotional sentiment, sweeping away the practical common sense of our legislators, was followed by the inevitable logical results of their action, which was clearly pointed out by the medical press while the measure was under discussion.

Major Lewis Seaman, late Surgeon U. S. V. Engineers, whose recent contributions to medical literature on food and sanitation in the army have been most valuable, at the last meeting of military surgeons read a paper in which he showed, by a statement of facts, the short-sighted policy of doing

away with the canteen and the bad results of its action upon the soldiers.

The liquor furnished by the canteen was pure, while that obtained at the saloons was often of the vilest quality, acting like rank poison.

At Paniqui, in the Philippines, during February and March, 1900, there were between seventy and ninety trials by court-martial each month; four-fifths of the offenses were intoxication from native vino.

A canteen was established in the latter part of March. Since then until February, 1901, there were never more than twenty trials a month. Major Seaman strongly advocates the reestablishment of the canteen, and says: "When the canteen was maintained the soldiers drank less, were under better influences and returned sober and contented to their library, reading-rooms or quarters.

"When the misguided enthusiast of the Woman,s Christian Temperance Union stop to reflect that the result of their influence in inducing Congress to abolish the canteen has produced an enourmous increase of wretchedness in the army hospitals, and made many a husband, father and lover the victim of degradation, they may indulge in less self-congratulation and conclude to cease interfering with regulations about which they are helplessly ignorant.

"The canteen was the most rational compromise that the ripe experience of the ablest officers in the army could devise."

In connection we might refer to the lack of common sense in very much of the legislation in reference to prostitution. In large cities no act of legislation, however stringent or severe, can abolish the vice, while the stimulants to human passion remains as they are. We must take society as it is, and, while we throw around it all the protection which practical laws can devise and which can be carried out in their integrity, realize the fact that the vice exists and must exist until the pulpit, press, family circle, our educational institutions, develop a higher sense of the harmony and purity of civil and social life.—*New York Medical Times.*

Double Ovariotomy in the Eightieth Year.

Krusen operated in May, 1899, on a woman born in February, 1820. Twenty-six years before the operation she first noticed a lump in the left side of the abdomen; it gradually increased in size, but did not become painful and bulky till two months ago. The abdominal circumference at the umbilicus was forty-five inches. There was some free fluid. The tumours removed were two proliferating glandular cysts, weighing with their contents over fifteen pounds. They were easily removed, as there were no adhesions. The abdominal cavity was flushed with hot normal salt solution. Only two-and-a-quarter ounces of ether were required, and the patient's condition when taken from the table was excellent. The operation took thirty-five minutes. Convalescence, otherwise uninterupted, was complicated by an attack of Bell's palsy, which was noticed immediately after the operation, and persisted for several months. The patient was in good health in February, 1901, nearly two years after the operation.—*British Medical Journal.*

Internal Antisepsis*

By Reynold Webb Wilcox, M. D., LL. D., Professor of Medicine and Therapeutics in New York Post-Graduate Medical School and Physician to the Hospital; Physician to St. Mark's Hospital.

The author begins with the statement that it is in the field of the infectious diseases that internal antisepsis will of necessity have its most important application. It should be useful in septicæmia, and possibly in pyæmias in which the pus foci are not accessible to the surgeon. Not that the author rejects surgical methods; accessible foci of infection should receive that treatment. His plea is for a method of combating infection in cases where surgery fails.

Is internal antisepsis possible? If the symptoms indicative of septicæmic infection retrogress, if the chills, malaise, headache, remittent fever, restlessness, prostration, sweating, muttering delirium, red and glazed or leathery tongue, full, bounding and compressible pulse, enlargement of the spleen, and hypostatic congestion of the lungs gradually becomes less marked under the administration of a remedy, it may be suspected that the improvement is due to it. If this association of remedy and relief becomes fairly constant, and the failures explainable, the suspicion may become a well-established belief.

To be an efficient antiseptic a remedy must reach the micro-organisms anywhere in the entire area of distribution of the blood and either completely destroy them or prevent their futher growth. The symptoms due to bacterial activity, as well as the evidences of the presence of the micro-organ-

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isms in the excreto, must diminish and disappear.

The author then proceeds to instance some of the various methods by means of which the efficacy of internal antisepsis is demonstrated. Thus, as he proved in his Albany paper of 1895, chlorin administered in typhoid fever cleans the tongue, improves the appetite and digeston, lessens the fever, deodorizes the stools, betters the general condition and the nervous system, and shortens the duration of the disease. In tuberculosis the administration of creosote, and more especially the Carbonate of that drug in prolonged doses, is followed by a diminution of the number of bacilli in the expectoration, as has been demonstrated by Holscher and others. In many diseased conditions of the alimentary canal Bouchard found that the number of pathogenic bactersa in the faces was markedly diminished by the administration of naphthol. Hueppe found that no cultures could be made from the intestinal contents of a patient who had died from an apoplexy appearing in the course of an attack of Asiatic cholera who had been treated with bismuth tribromophenolate (Xeroform) exclusively. In other and exactly similar instances,, when tannic acid injections had been used, cultures were made without difficulty.

Finally, it has been known for some years that most typhoid fever patients discharge large numbers of Eberth's bacilli in their urine. Quite recently Richardson, Horton-Smith, Gwyn, and Andrews have demonstrated that hexamethylen-tetramine or Urotropin administered by the mouth causes them to disappear completely.

Urinary toxicity itself, as shown by its varying toxicity when injected experimentally, Wilcox does not believe to be an accurate method of determining the value of a certain plan of treatment. Whilst changes in the uro-toxic coefficient may be assumed to indicate variations in the elimination of toxins by the kidneys, physical or chemical analysis is necessary to prevent misleading results.

To the question as to whether internal antisepsis may ever be harmful the author answers in the affirmative. Certain substances which are most trustworthy antiseptics in vitro are poisonous in the body. Instances of fatal poisoning by phenol, iodoform, corrosive sublimate, etc., have been too frequent to be ignored; and these and all substances which are local irritants or destroyers of blood corpuscles connot be employed.

More especially as regards the employment of intestinal antiseptics it is often held that the bacteria are essential for digestion and assimilation, and that their destruction is liable to interfere with the nutrition of the patient. The researches of Nencki, Nuttal, Thierfelder and other observers would show that bacteria are not necessary for these physiological processes, though certain loosely - combined compound, such as salol, bismuth salicylate, and others are broken up by them. This is confirmed by Levin's observations in the polar regions, where he found the intestinal contents of bears, seals, ducks, sharks, sea-urchins, crabs, and other animals bacteria free and sterile.

Dr. Wilcox then explains the conditions under which internal antisepsis should be employed. Surgical measures should be used when the infective foci are accessible. Infections resulting in septicaemias in which the toxins are most potent in causing danger, such as diphtheria, should be neutralized by antitoxins. Internal antisepsis is in place where the streptococcic infection is of most importance, and where a serum treatment is not thoroughly established. He warns his hearers that care must be taken in the administration of remedies like naphthalin or salicylic acid, which may act unfavorably upon the kidneys, or any of the phenols, which are cardiac depressants. Kind Providence is just as watchful over the pathogenic bacteria as over their unwilling host. On the other hand he depricates the position of bacteriologists who deny the efficacy of small doses of intestinal disinfectants which do not kill the bacteria; forgetting that they may paralyze them and prevent the formation of toxins.

Among the general internal antiseptics the author considers chlorin, the salicylates, and quinin, and silver, recently suggested for that purpose. In 1890 Carey Lea first produced it in allotropic form, and seven years later Crede first used the Colloidal Silver in medicine, It is almost entirely soluble in water and albuminous fluids, and it seems either to inhibit the action of staphylococci and streptococci, or destroy them altogether.

Colloidal Silver is employed internally dissolved in equal parts of albumin and glycerin, to prevent its conversion into chloride in the stomach; in aqueous solution hypodermically, since it is non-irritating; as a 15 per cent. ointment, known as Unguentum Crede, for inunction; and by rectal and intravenous injection. Schlossmann has shown that it is non-toxic and unirritating to mucous membrances, and thus far no case of argyria has been reported.

Crede claimed that the Colloidal Silver

has a very beneficial influence and often effects a rapid cure in recent and chronic sepsis and furunculosis, when secondary changes in the vital organs have not occurred. He and others have treated osteomyelitis, phlegmonous angina, furunculosis, erysipelas, so-called gonorrhœal and articular rheumatism, etc., by this method. Various reports, some very enthusiastic, have been presented; on puerperal fever (Peters, Jones, Voorhees), cerebrospinal meningitis (Schirmer), acute mastitis (Cumston), malignant scarlet fever (Crede) divers septic processes (Werler), furunculosis (Wolfram), and finally in purpura in the horse (Dieckerhoff). Wilcox's own experience in septic phlebitis, of which an unusually large percentage has occurred in his typhoid fever cases, has been most satisfactory. He employed it as inunctions of thirty minutes duration. In one instance of septic phlebitis following amœbic dysentery the results were almost marvelous.

The author then considers intestinal antisepsis, of which there are many methods. Amongst the most useful remedies for this purpose are various insoluble substances, such as naphthalin, betanaphthol, and various bismuth compounds. Naphthalin, however, sometimes produces vesical irritation and other untoward symptoms. Salol is effective in many cases, but its use presupposes sound kidneys, and if fever is present or the contents of the duodenum are too acid, it is not decomposed into its constituents. Betanaphthol, though its antisptic action was conclusively proven by Bourchard, is found too irritating to the stomach. The bismuth compounds are not irritant, and their use has been crowned with success.

The two compounds of bismuth that have been especially studied are the naphtholate (Orphol) and the tribromo-phenolate (Xeroform). With the former Jasenski found that whilst the bismuth was almost completely excreted by the bowels, some of the napthol was eliminated by the kidneys. It is certainly not poisonous in daily doses of seventy-five to one hundred and twenty grains for adults, and this quantity is quite sufficient to inhibit bacterial action. The literature has been extensive, and, in general, confirms Wilcox's personal observations.

In regard to the tribromo-phenolate the observations of Fasano are quite conclusive. It rapidly diminishes the amount of indican in the urine and the putrefactive action in the intestines. After five days use the fæces of patients suffering from typhoid fever give no cultures of typhoid bacilli or the bacterium coli. Intestinal tuberculosis in some instances yields to emulsions administered either by the mouth or the rectum. The tribromo-phenol is apparently slowly liberated, so that no poisonous symptoms appear even from daily doses of over one hundred grains. Some of it, at least, passes out through the urine, for Reynders has been able to detect tribromophenol twenty-four hours after the absorption of the drug.

Internal remedies designed to act on the tubercle bacilli are too numerous to mention. Beechwood creosote, conceded to be useful in the treatment of pulmonary tuberculosis, has well-known disadvantages. The non-toxic and unirritating Carbonate, and perhaps other derivatives, and Guaiacol Carbonate, have thoroughly supplanted it. If it is not germicidal to the bacilli, it renders the soil unsuitable, and hinders their development. Twenty to sixty drops of the Creosotal thrice daily in port or sherry seems to be efficient. Thomson, Smith, Cassoute and Corgier testify to its value in pneumonia. Eschle has shown that Guaiacol Carbonate is certainly harmless. Four to seven grains four times a day is a sufficient dosage.

Urotropin (hexamethylen-tetramine), a condensation product of formaldehyde and ammonia, first made by Von Butlerow in 1860, is probably the best of the urinary antiseptics. It is used to sterilize the urine by destroying its micro-organisms, which it does effectually in pyelitis, pyelo-nephritis, and cystitis. Nicolaier employs about eight grains thrice daily; but doses of even one hundred and fifty grains are well borne. Formaldehyde is liberated in the urine; and this, even in the smallest amounts, prevents the development of micro-organisms. Richardson found that its use by typhoid patients always freed the urine from the bacilli. Wilcox has made a personal observation in a case of tubercular cystitis, in which the baccilli diminished notably in the urine during its administration, but a continuance of the medication is necessary.

Thirty years ago, the author concludes, the foundations of surgical antisepsis were laid, and the ideal result has now been nearly attained. Internal antisepsis today rests upon quite as secure a basis as did the surgical at the beginning, and the ensuing three decades will doubtless see the fruition of our most daring hopes. As the surgeon gives credit to Lister, so must we acknowledge our indebtedness to Bouchard. We can now safely say that internal antisepsis is more than the dream of the theorist.

The Arrest of Hæmorrhage in Operations on the Liver.

Chapot-Prevost (Arch. Prov. de Chir., April, 1901) finding the different methods employed for arresting hæmorrhage after removing a portion of the liver more or less unsatisfactory, has carefully studied the subject of hæmostasis in this branch of surgery with a view to the improvement of its practical details. He regards as an ideal method one by means of which the surgeon is enabled to apply for a sufficient time to the hepatic wound a regular and methodical compression such as that exercised by the fingers applied directly over the surface of the gland, and one which at the same time will prevent complete closure of the abdominal wall. This compression, it is asserted, may be affected by bringing the contiguous surface of the parietal peritoneum into close contact with the surface of the liver on either side of the wound in this gland, and also by bringing together the raw surfaces of this wound, by means of quilled sutures passed through the abdominal wall and liver and secured on the external surface of the abdomen by rolls of gauze. The thorough efficacy of this plan has been demonstrated by the results not only of experiments on animals but also of an operation performed for the separation of two living girls who were united by a band of skin enclosing a thick bridge of hepatic structure and a cartilaginous rod formed by coalescence of the xiphoid processes. The age of this double monster, judging from the illustrations given in the article, was 6 or 7 years. The intervening thick mass of hepatic tissue having been divided the raw surfaces on which the open ends of three large blood vessels could be seen were in each child compressed by quilled sutures. The immediate results of the operation were satisfactory as perfect and persistent hæmostasis was affected by the author's method. In the course of the operation three serous cavites—the peritoneum pleura, and pericardium—which were common to both children, were opened and closed by sutures. One child recovered and was living at the date of the preparation of this paper. The other child died on the sixth day from the date of operation from pleurisy.—British Medical Journal.

Influence of Lead Poisoning on Offspring.

Bourneville, in an editorial, quotes Paul's statistics to prove that the children of parents suffering from lead poisoning are doomed to certain death in nearly every case. Only 10 children were born alive in 141 pregnancies in which the father, and only 1 out of 27 pregnancies in which the mother was a chronic sufferer from lead poisoning. Six women who had previously borne 10 healthy children passed through 43 pregnancies after lead intoxication with only two living children and both of these sickly. The French authorities have been collecting statistics in regard to the offspring of painters who have to handle white lead, and it was found that only 15 children had survived the third year, out of 141 pregnancies. The records show that in thirteen years, 5484 painters have become affected and leaving aside the insane, paralytic and idiots, the deaths alone amounted to a total of 598. Bourneville adds that he is now collecting personal data to demonstrate the influence of the profession of house painter on the production of idiocy.—Journal of American Medical Association.

The Pathology of Functional Disease.

Functional disease is a term applied to complex groups of morbid manifestations for which no physical basis has hitherto been discovered, and we seemed to have settled down comfortably with this confession of ignorance for all the world as if the non-recognition of structural lesions were all that could reasonably be expected of us in this connection. A cause there must be, and there is reason to suppose that careful investigation of the chemical physiology of the victims of these manifestations might reveal disturbances of secretion or assimilation which have for effect to alter the quality of the circulating fluids. The singular absence or perversion of will power, and the concomitant lack of control over the emotions, which characterize these patients are phenomena with which we are familiar as the result of various intoxicating agents. The study of physiological chemistry has made great strides of late years, and we look to its adepts to dissipate the obscurity which surrounds affections well worthy of careful study, in spite of the fact that they do not appear to be associated with, or dependent upon, obvious lesions of the solid tissue.—*Medical Press.*

Neuralgia

Hughes objects to the surgical treatment of trifacial neuralgia, which he thinks can be generally managed by medical means. His chief reliance has been belladonna or its active principle (atropin), aconite, strychnia, large doses of quinin with gelsemium, hypophosphites of iron, with locally, ether, menthol, heat and electricity. He also uses arsenic in minimum doses and some coal tar anodynes. In some cases he

has found it necessary to employ large doses of muriate of ammonium after Antie's method, 30 grs. three times a day. He has done this often in combination with bromid of ammonium, and found other bromids often useful as alternatives. His special objection is to Gasserian ganglion excision which he thinks is unnecessary and inapplicable because trifacial neuralgia is not exclusively a disease of the ganglion or of the fifth nerve, and the danger of operation with its uncomfortable side-effect are such as should generally prohibit it. If he was to suggest a neuro-surgical plan of treatment when medical treatment failed, he would prepare the patient for radical relief by securing hopeful consent to combined surgical and neuro-logical treatment, put him or her to bed, give chlorform, extirpate the involved peripheral nerves if desirable, keep both eyes closed as long as one would keep them closed after Gasserian gangl iectomy, keep visitors away, and use proper medication for six to ten weeks. The patient should be treated internally and constitutionally as well as locally.—Journal of American Medical Association.

Carbuncles.

The treatment of carbuncles recommended by Carothers is prophylactic, abortive, medicinal and operative. Many cases can be prevented by cleanliness and where damage to the kidneys and liver exist these should be looked after. If seen in its beginning the carbuncle can be aborted by injection of a few drops of carbolic acid, or a white hot needle thrust into the center of the inflammation. In more advanced cases he uses a sharpened stick of caustic potash thrust down to the underlying fascia in the center of the carbuncle producing a necrosed crater, and this relieving tension and avoiding the more extensive operation of the extirpation. The medicinal treatment is the relief of pain by tonics, diet, etc. He prefers for the local treatment equal parts of castor oil and turpentine applied to the carbuncle on absorbent cotton or gauze, which is to be kept thoroughly saturated. It relieves pain at once so that in most cases no narcotic is required. It prevents suppuration. He first limits the inflammation and promotes granulation. The most rational operative treatment is the burning away of the entire mass with the actual cautery, creating the carbuncle into a burn of the second or third degree. He does not look with favor on the cutting operations, especially the crucial incisions or curette, which may do serious damage.—Journal American Medical Association.

Alcoholic Gastritis and Caffeinism.

The symptoms of digestive and nervous disturbance incidental to chronic coffee-poisoning are reliable to cause errors in diagnosis, from the fact the results of alcoholic excess produce effects which singularly resemble the signs of dyspepsia arising from the ingestion of coffee in toxic amounts. In some cases the distaste for solid food is great. Palpitation is not often noted, but a diminution of the pulse is a matter of ordinary observation. There is insomia, and the patient gradually becomes extremely emaciated. In well-marked instances painful cramps of the thighs are complained of. The abstention from coffee is followed by immediate amelioration of the more distressing symptoms of the disorder, and in this rapidity of recovery the affection differs in marked respect from the results noticed in alcoholic gastritis following the disuse of alcohol. The trembling of the limbs and the twitching of the lips noticed in both conditions are generally described as being the first symptoms to show improvement when the case is one due to poisoning from coffee. In the opinion of some of the Continental observers chronic coffee-poisoning may be induced not only from the poor quality of the article consumed, but also from improper methods of preparing the beverage.—The Medical Press.

The Therapy of Cancer.

P. Lassar (Berl. klin. Woch., March 11th, 1901) reports two cases of epithelioma treated by 'Asiatic" pills. The first patient took 1,000 pills during the course of several months, and in all thus received about 1 gram of ac. arsen. She was 62 years of age. The growth was situated on the bridge of the nose, and was about the size of a lentil. A small piece was excised for microscopical examination, and showed the structure of epithelial cancer. The tumor gradually diminished in size, and eventually disappeared altogether, there being only an indistinct scar where the small portion had been excised. The second case was that of a man, 74 years of age, who was treated by arsenious acid in 1892 for a small tumor situated on the left ala of the nose. Microscopically, the growth proved to be an epithelioma. The growth disappeared completely, and there has been no recurrence. A photograph of the same patient was taken this year, that is, 9 years after. Lassar reports that of the three cases he reported in 1893 all have remained free from recurrence; one, however, a lady aged 61, having died about two years ago of an independent condition.—British Medical Journal,

Quinine Idiosyncrasy.

Idiosyncrasies have long been known and recognised. Montaigne refers to them, as do Aaiatus, Lusitanus, and Spigelius. and many other authors, but they one and all looked on them as curiosities of medical experience until M. Lorry published his "Troctatus de Morbis Cutanee" in 1777. The great importance of recognising rashes due to idiosyncrasises came in time to be recognised, and under the title "Antipathies" Milligan and other writers collected numerous examples. But until Prince A. Morrow's great monograph, "Drug Eruptiona," few medical men had any idea that drug rashes so closely simulated the exanthemata. Among the more generally used drugs Dr. Morrow gives a formidable list of the eruptions that follow from the use of quinine, from the well-known pamphlet of Jean Baptiste Chevallier (1835) up to 1877. He has shown that in the majority of cases the rashes assumed a scarlatinoid, or, as more modern writers might say, "a fourth exanthem" form, "followed by desquamation of a brannyor lamellar character," and of course liable to be mistaken for scarlatina, particularly as the tonsils are not infrequently inflamed, and the temperature sises to 102 deg. F., and in some cases was as high as 104 deg. F. or even 105 deg. F. Of recent cases the most interesting are those given by Dr. H. A. Hare(Therapeutic Gazett) :—"A man fifty-three years of age, was orderded a pill containing about one-sixtieth of a grain of arsenious acid and two grain of quinine three times a day as a tonic during convalescence from a severe illness. Within twelve hours of the administration of the first pill he developed an intense erythematous rash all over his body, with intense itching and puffiness of the skin about the face. At the end of five days with the subsidence of the acute injection of the skin marked desquamation took place over all portions of the body with the same freedom as is frequently seen in severe scarlet fever, and six weeks afterwards the skin on the palms of his hands and the soles of his feet was still actively desquamating. No sooner had the symptoms appeared than the patient asked if he were receiving quinine, and on being told that he was getting the drug, he immediately recognised the cause of his difficulty, stating that he always had a similar affection when this drug was administered, even when it was given in remarkably small quantities." For this patient's daughter. a woman of twenty years of age, Dr. Hare prescribed a pill of iron, arsenic, and quinine and she too developed "a general rose rash all over her body," which was followed by an active desquamatiou of the palms of the hands and soles of the feet. Where a quinine idiosyncrasy exist even the topical application of the alkaloid will produce an eruption. Delioux de Savignac reports a case in which the application of a pomade containing quinine produced intense pruritus and an eruption of licheu. As quinine has now practically become a domestic remedy, it is well in all suspicious cases to inquire if the patient with an ill-defined rash has been taking the drug.—*Medical Press and Circular.*

Cæsarean Section for Placenta Prævia.

F. D. Donoghue, December 6th, 1900, summarises the contributions which have been made to the question of the treatment of the placenta prævia by Cæsarean section which was first proposed some years ago by Lawson Tait. He also narrates a case of central placenta prævia in which this operation was successfully performed. The patient was forty years of age and the amount of blood lost had been very great. The operation was done in the patient's own house, and in this respect was performed under disadvantages. The uterus was pulled out of the abdomen through the incision before it was opened into, and gauze was packed in behind it. It was opened by a vertical incision in the middle line, the membranes divided, and the child extracted and easily resuscitated. The placenta was allowed to seperate, and in about ten minutes was removed by the incision. The uterus and abdomen were closed. The whole operation occupied forty-five minutes. The patient sat up on the twelfth day and left her bed on the twenty-first. The infant also is alive and well.—*British Medical Journal.*

The Spitting Nuisance.

The United States are showing us a good example in the vigour and determination with which they have recently set about the abatement of the spitting nuisance. Arrests are common in New York, and magistrates are beginning to deal seriously with the offence. Mr. Sexton, President of the Board of Health, not long ago assigned 70 of the 100 policemen detailed for tenement houses and other sanitary work to the special duty of riding about the town on surface and elevated railways, and arresting those whom they saw break the ordinance against expectoration on the floors of street and railroad cars and other public vehicles, ferry boats, and public buildings. The persons

arrested were dealt with in the regular way in the police-courts, and the officers will also report from time to time the general results of their work and observations to Dr. Roberts, the sanitary superintendent. The street railroad companies, wherever they have not already done so, are required to place the following placard conspicuously in all street cars: "Spitting on the floor is a misdemeanour; 500 dollars (£100) fine, or imprisonment for one year, or both may be the punishment therefor. By order of the Board of Health. Section 194 Sanitary Code. Section 15 Penal Code." Some persons have already been fined for breach of this law. In Newark and San Francisco the courts have enforced their anti-spitting laws, offenders having been convicted and penalties imposed. A millionaire was convicted by the Superior Court and the judgment upheld by the Supreme Court of California. He paid his fine of 25 dollars (£5) and spent one day in goal. In New Orleans a stringent ordinance was recently passed by the City Councils.—*British Medical Journal.*

Treatment of Diabetes Mellitus.

By Dr. Abraham Mayer—The treatment of this disease, until we find the exact ætiological factor or factors in its production, must be influenced by the symptoms of individual cases. As to diet, the author refers to the tables of Rubner, showing that individuals of different weight and occupation require a different number of calories to the kilogramme. As an aid to memory, the author notes that one egg represents about eighty calories; lean beef or fish, as many calories as its weight in grammes; very fat beef or mutton, three times as many calories as its weight in grammes; butter, eight calories to the gramme; wheat bread, two and a half calories to the gramme: gluten bread, two or three calories to the gramme. Of drugs, the author mentions opium, arsenic, and the bichloride of mercury. He uses opium for its benificial effects on thirst and for its general effect on the patient's physical and mental condition. In severe cases which show Gerhardt's reaction, it should never be used, on account of the danger of impending coma. Arsenic frequently increases the limit of assimilation for carbohydrates, diminishes the glycosuria, and acts as an excellent tonic. For the bichloride of mercury the author alleges "a certain, perhaps a specific action" in the reduction of sugar and in the amelioration of symptoms. It is always safer to anticipate coma than to treat it when it arises.—*New York Medical Journal.*

The Death-rates for 1900 in the Great Towns.

The annual summary of births, deaths, and causes of death in London and other large towns presents, as usual, features of much interest. The corrected death-rate for England and Wales in 1900 was 18.31, and, without the 33 great towns, 17.33, while that of the latter was 21.11. Of the 33 towns the four worst records were Preston 26.42, Manchester 27.34, Liverpool 28.17, and Salford 28.22, as against London 20.02, and Croydon 15.22. In the 33 town there was a mortality below the average for the preceding decennial period in measles, at a rate of 0.43 per 1,000 for 1900 against 0.58; in scarlet fever at 0.13 against 0.21; in whooping-cough at 0.45 agninst 0.49. The mortality from continued fevers and diarrhœa were practically stationary. Infantile mortality, an important item, exactly corresponded with the average proportion of the preceding years. In London the death-rates of the various sanitary areas from all causes varied, after distribution of deaths in public institutions, from 11.3 in Hampstead, 12.6 in Stoke Newington, 13.8 in St. George's, Hanover Square, to 26.5 in Holborn, 26.8 in St. Luke, and 27.3 in St. George the Martyr, Southwark. The diminution and excess table of London deaths, compared with the preceding ten yearly average, shows an excess of 488 deaths from influenza, 116 from enteric fever, 136 from diarhœal diseases, and 451 from cancer. This last item seems as inexplicable as the excess of 158 extra deaths from accident. On the other hand, the number of lives saved, as shown by diminution of the average, is considerable, being no less than 886 from measles, 554 from scarlet fever, 483 from whooping-cough, 705 from diphtheria, 888 from phthisis and other tuberculous diseases, and 1,045 from diseases of the respiratory system. Compared with the recorded death-rate of 18.31 for England and Wales, of 19.54 of the 33 great towns, and of 18.79 in London, we find that of Edinburgh was equal to 19.4 per 1,000, of Glasgow 22.6. In Paris the rate was 20.6, and of Dublin 27.6. In Paris the rate was 20.6, in Berlin 19, in Vienna 20.5, and in New York 20.6. The lowest foreign rates in great towns were 12.6 in Sydney, 15.5 in Christiania, 16.4 in Brussels, 16.6 in Amsterdam, while the highest were 24.5 in St. Petersburg, 24.7 in Munich and in New Orleans, 28.9 in Trieste, and 30.1 in Moscow.—Medical Press.

Small doses of bismuth will steady the mind in delirium.

Arsenic in the Dyes of Stockings, Etc.

There would appear to be now, in the light of recent inquiry, a recrudescence of the employment of arsenic in the dyes used, at any rate in stockings. This fact only shows what a sharpe watch must be perpetually kept up in order to check an objectionable practice. There can be little doubt that in the cases cited the arsenic in the stockings was introduced through the dye. It would seem that the employment of arsenic and its compounds, or of substances contaminated with arenic, will inevitably have to be placed under special regulations, for apparently the presence of arsenic is unavoidable in a very great number of materials. The Royal Commission on arsenic should include in their inquiry the question of the danger arising not only from arsenic food products but from arsenic clothing also, and should decide upon the limitations of the amounts of arsenic in any case.—The Lancet.

The Relation of the Art and Science of Surgery.

An interesting paper has been written by Dr. John A. Wyeth, of New York, on "The Value of Clinical Microscopy, Bacteriology, and Chemistry in Surgical Practice," being his oration on surgery before the American Medical Association at St. Paul. In this address, Dr. Wyeth shows the great advantage in fact, the absolute necessary, for every one who does surgical work to understand thoroughly the science as well as the art of his branch, and he reviews very carefully what bacteriology, chemistry and the microscope have done to make surgery an exact science. He points out very clearly how impossible it is for one to be a thorough surgeon who does not understand and appreciate the work done in the laboratory, and tells us that this knowledge is as necessary as the practice of a perfect aseptic technique. The author shows a wonderful familiarity with the various methods of examining the blood, urine, sputum, etc., when it is remembered that his life as a surgeon and teacher is a very busy one, and what he has also done to advance the practical side of surgery. Although all good surgeons are not agreed on these subjects, one has but to refer to what the blood count alone has done to aid in surgical diagnosis and to direct surgical treatment, to concur with Wyeth that it is the duty of every surgeon, it matters not how busy he may be in the operating room, to familiarize himself with the science of surgery and to keep himself informed of the great advances made in laboratory methods. These advances all have a very practical bearing on his success as a life-saver. Too often are operations recommended and performed when, if we had been more careful in our examination of the supposed healthy organs as well as those diseased, the operation might have been avoided and perchance an operative death prevented. Not infrequently do we discover after operation that our patient is suffering from some lesion of the kidney or condition of the blood, which, if known previously, might have greatly altered our trertment. The wise and thoughful advice of Wyeth cannot be too heartily commended to those doing surgical work.—Philadelphia Medical Journal.

The Mortality of Appendicitis.

Dr. J. B. Deaver, of Philadelphia, based his remarks on statistics of appendicitis occuring during the year 1900 at the German Hospital. Of the total number operated upon, 268.144 were acute and 124 chronic. The mortality in the acute cases uncomplicated by intercurrent disease was 15.9 per cent. In every case the appendix was ablated. The time elapsing from the onset of the symptoms to operation varied from a few hours to fifty days. Among the chronic cases there was but one death, this being due to rupture of an ovarian cyst. Autopsy was made in every case of death occurring in the hospital. The speaker divided his fatal cases into three classes according to when death occurred: (1) prior to operation, (2) during operation, or (3) following operation. Septic peritonitis was a general cause of death. It arose in various ways. Certain cases, the fulminating, were invariably lethal despite all operative promptness. These cases were characterized by absence of fever, slightly elevated pulse, absence of leucocytosis, and almost invariably by severe disturbances attendant during anesthesia. Second in importance to removal of the appendix was thorough serach for hidden pus cavities. By early operation and exsection we should successfully avoid (1) fæcal fistulæ, (2) subsequent attacks, (3) necrosis of the bowels. Of eleven patients not operated upon, three died, and six left the hospital with a swelling in the right side of the abdomen. Every death occurring in the second attack could have been prevented. Upon whom, Dr. Deaver asked, should this responsibility rest?—Medical Record.

Diagnosis of Meningitis.

The various symptoms indicating the presence of meningitis are reviewd by Aldrich, according to their various diagnostic

values: the widely varying onset, head pains, convulsions, facies, mental state, pulse, temperature, respiration, etc., and he mentions one respiratory change which he has observed so often that he believes it of diagnostic value. In normal inspiration the adominal walls are expanded, but retracted on expiration. In meningitis, however, there is a retraction of the walls during inspiration and the descent of the diaphragm, probably due to hypertonus of the muscles, which is a constant and early symptom. Vomiting, abdominal symptoms, muscular rigidity, urinary retention, Kernig's sign, cutaneous eruptions, etc., various sensory symptoms, leucocytosis, etc., are mentioned. He believes that in lumbar puncture we have a great step towards accuracy in the diagnosis, and calls attention particularly to a condition of the serum which has been observed by him since 1898. When a test tube containing a column of cerebrospinal fluid from a case of meningitis is allowed to stand from twelve to twenty-four hours without agitation, a thin filament of fibrin forms in the center of the column of fluid, and seems to be snspended from a delicate pellicle at the top and extends to the bottom. Lifting out this fibrin with a platinum loop and with it spread out on the cover glass, cells of diplcocci were revealed. He thinks that this observation is of special value where the use of the centrifuge, and microscope and culture studies are not available, The same symptom has been noticed by Breuer in Vienna and the same diagnostic importance attributed to it.—Journal of American Medical Association.

Typhoid Perforation.

It occurs as a rule at the end of the second or begining of the third week and special attention should be given at this time for its occurrence. The first symptom is pain, sudden in its onset, agonizing in character, though this symptom may be dependent on other causes, even in cases of typhoid. A sudden and decided drop in the temperature usually follows, though not invariably, and it may be so transitory as to escape notice. The pulse usually becomes increased infrequency and decidely weakened, but not wiry until actual peritonitis has set in. The most important part of the symptomatology is objective. With an opening between the bowel and peritoneal cavity there will be a more or less rapid outpouring of gas and fluid, gradually decreasing as the pressure becomes lessened. This gaseous distention of the abdomen, palpation signs, etc., are all noticed at length. Auscultation is of little value. A blood examination may reveal slight leucocytosis. The facial expression, sweating and decubitus indicate the passage into the third stage. The combinations of symptoms are, he says, generally so varied that it is almost impossible at times to diagnose the conditions early enough to allow operative interference with any chance of success.—Journal of American Medical Association.

Treatment of Sciatica by Intrarachidean Injections of Cocaine.

Pulle (La Rif. Med., February 22nd, 1901) reports the case of a man, aged 47, admitted into hospital October 8th, 1901, suffering from sciatica of about a month' duration. Blisters and ether spray, whic had relieved a previous attack, proving inefficacious, intrarachidean injection of 2 per cent. aouequs solution of cocaine was practised. The injection was in the fourth lumbar space, about 1 cm. to the right of the median line, the solution being warm. About three parts full of an ordinary hypodermic syringe was given with strict antiseptic preliminaries. The result was very satisfactory, and except for some sligh fever lasting three or four days and a patch of labial herpes, no secondary symptoms followed. The analgesia lasted about ten to twelve hours. The sciatica did not return, and the patient got up on November 16th, feeling quite well, and left the hospital on November 23rd in perfect health.—British Medical Journal.

The rich family of Mitsui, of Tokio, has offered an extensive site in that city for the erection of a university for women, and three other citizens have, between them, contributed a sum of $120,000 for the cost of the necessary buildings. The work is already in progess, and it is hoped the new university will be opened the coming spring. It is not likely there will be any want of students, as, in recent years, very many young ladies of good family have applied to be admitted to the university courses, especially to the Faculty of Medicine and the Polytechnic School. The latter institution is intended for the training of civil engineers, a circumstance which seem to show that Japan is about to set an example to Europe in opening up a new sphere of labor for the women of the future.

Codeine and apomorphine is an excellent combination in dry cough and is very serviceable in later stages of phthisis.

The Treatment of Eczema.

E. Kromeyer and P. Cruenberg (Munch med. Woch., February 5th, 1901) divide this subject up under three headings, first, the sedative treatment, to be applied in acute eczema, by the application of powders, ointments, pastes, etc.,; secondly, the removal of the chronic tissue changes in chronic eczema, and thirdly, the escharotic treatment of the acutely inflamed parts. Their communication deals with the last named. Of the older forms of treatment they prefer using caustic potash to lunar caustic and other like preparation, but point out the difficulty that exist in choosing the right time and the proper degree of cauterisation for the application, and the danger of doing much harm if the time and place are ill chosen. In lanigallol, which is a triacetate of pyrogallic acid, they claim to have a drug which has the advantages that it cannot do harm, that as it is an insoluble powder which does not become decomposed when resting on unbroken skin it cannot produce any ill-effiects on the surrounding healthy tissue; that on a chronically inflamed surface, such as eczema resembling psoriasis, it slowly splits up into its component parts and the freed pyrogallic acid can act to its utmost advantage; and that whenever the horney layers of the skin are absent pyrogallic acid is rapidly freed, and thus applies its cauterising action only on the proper parts, for example, vesicles and pustules. The action of pyrogallic acid as such produces its irritant and escharotic effects on healtth as well as unhealthy skin. They apply it as a paste :lanigalol 20 per cent., zinc paste 80 per cent., lanigallol 10 percent., oil of cade 5 per cent., zinc paste 85 per cent.; and lanigallol 10 per cent., ung. Wilkinson 90 per cent, Zinc paste is zinc oxide 1 part, starch 1 part, and white vaseline 2 parts; and ung, Wilkinsn is oil of cade 10 per cent,, precip. sulph. 20 per cent., soft soft 5 per cent., and zinc paste 65 per cent. They point out that the action is merely a superficial one, and therefore the combination with other drugs, such as tar (oil of cade), sulphur, soft soap, etc., is required in some cases. They give in detail the account of 10 cases, as examples of a great number treated by lanigallol, in each of which the effect appears to be very striking. All acute forms or chronic forms with recurring acute patches seem to be bettered by a judicious application, and as a special recommendation may be added that its application is particularly appreciated by the patients, as it allays the acute itching which accompanies so many forms of eczema. They end their article by stating that although useless in impetigo contagiosum, sycosis, herpes, pityriasis, etc., it stands first in the list of medications for eczema.—British Medical Journal,

Syphilis and Urinary Excretion.

Patoir (Arch. Gen. de Med., April 1901) has made a study of some of the indirect effects of syphilis, and finds that syphilitic anæmia seems to play an important part in the changes taking place in some of the organs. This general alternation of nutrition seems to be reflected especially on the kidneys. Until lately little attention has been directed towards the uninary excretion in syphilis. There seems to be a form of diffuse inflammatory reaction peculiar to the kidneys, which may proceed to actual acute nephritis. In other cases albuminuria is present without there being any marked climical manifestations of nephritis. The author comes to the conclusion that in about half the cases of syphilis there is evidence of some renal lesion. This leison may be present during a period of activity, whether secondary or tertiary. During the period of eruption albumen, sugar, and urobilin appear, and the total amount of urea is increased. These changes are most marked in young subjects. On the other hand, in elderly persons in whom there is perhaps a certain amount of renal inadequacy, the tendency of syphilis is to reduce the quantity and specific gravity of the urine. Another interesting fact noticed by the writer is that when the general disease becomes dormant the urinary secretion returns to the normal average, except in some cases where the attack has been particularly severe, and where the patient has suffered from more or less intense anæmia. In such cases the tissues seem more or less debilitated, and as a consequence the renal excretion may show some permanent damage. Conversely, in several cases where the attack is a benign one the patients do not show any alteration in urinary secretion.—British Medical Journal.

Hypnotism Extraordinary.

The Italians appear to be peculiarly susceptible to hypnotic suggestion under slight provocation, and failing any external influence they are prone to a kind of auto-hypnotism which spreads until it assumes an epidemic form. We can recall an instance in which a whole village, or at any rate the feminine inhabitants thereof, became the subjects of maniacal excitement which was only appeased by the dispatch of a regiment of dragoons, whose presence had the desired effect of restoring peace to

their troubled souls. Quite recently a somewhat similar outbreak took place in a small village near Udine, where some twenty persons of both sexes and of all ages became hypnotised after watching the contortions of a professional exorcist, and gave themselves up to more or less violent and destructive antics. Although these manifestations are seen to the best advantage among the impressionable population of Southern Italy, it must not be forgotten that in a modified form they characterise crowds in all parts of the world. The influence of a crowd collectively on the individuals of which it is composed is a factor with which authorities have to reckon, and history shows that such a crowd will do things and commit deeds at which its units individually would be ashamed and even terrified. All commanding personages exert a similar influence over those who come within their sphere. Great preachers, political orators, and even mere demagogues possess the power of galvanizing their audiences, dominating their intelligence and subordinating their reasoning powers for the time being. There is no strict line of demarcation between this influence and that to which, at a more advanced stage, we apply the name hypnotism.—Medical Press and Circular.

Trained Nurses as Medical Experts.

Without entering in any way on the Shillelagh case we may draw attention to the fact that at the inquiry by an inspector of the Local Government Board a trained nurse was allowed by the inspector to give expert medical evidence on the diagnosis of scarlatina. This is wholly irregular, as being altogether outside a nurse's duties, and in no way appertaining. The principle at stake is a grave one—one which immediately affects the interest of the medical profession. A trained nurse can and should when called on testify as to facts. But we do protest in the strongest manner against the opinion of such an unqualified person being admitted as a diagnosis. The essential of a diagnosis is the knowledge of all such conditions as stimulate the disease and the recognition of such as eliminate them from the case. A diagnosis is the indentification of a disease by careful investsgation of its symptoms and history; this a trained nurse cannot give. She may and usually does make extraordinary guesses; indeed, her weakness is to think that she possesses a special gift of diagnosis. But we contend that the medical evidence of a trained nurse is not allowable nor can it be trustworthy. —Medical Press.

Nasal Tuberculosis.

This condition was first noticed by Morgagni, but the first primary cases were published by Riedel. Renshaw (Journal Path. and Bact., February, 1900), having regard to the fact that 116 cases have now been published, expresses the opinion that the condition is not so rare as is generally supposed, and that, if looked for, many obscure nasal affections would prove to be of this nature. Cases of strumous glands in which no primary cause is to be found may also in some cases be due to primary invasion of the nose. In a series of experiments on guinea-pigs he was able to show that the nasal mucous membrane may be infected by simply introducing sputum while leaving the membrane intact. Of the eight animals used, all showed signs of local irritation, and in seven definite tuberculous lesions were produced. With regard to the extension from this primary focus, infection of the meninges did not occur, even in extensive ulceration of the superior fossa, nor was direct infection by way of the respiratory passages found; the track of invasion was in every case by the lymphatics to the glands and from these to the viscera. The further the lesion is from the entrance to the nostril the more rapid it seems is the course of the disease, and the earlier the invasion of other organs.—British Medical Journal.

Effects of the Recent Extreme Heat.

The great number of prostrations and deaths due to the extreme heat of the last week has been a matter of daily news. The capacity of all the hospitals in the thickly populated portions of the city was overtaxed in caring for the sufferers, Aid was rendered by the Emergency Corps, by the police department, and by private individuals and firms, who, in some instances, furnished automobiles as ambulances to supplement or replace exhausted horses. The Pennsylvania and Episcopal hospitals had their usual tents erected, and at some institutions small tents were also put up. Systematic examinations of the blood are being made at short intervals in cases of both heat exhaustion and thermic fever to determine the condition present. Intravenous infusion of saline solution has been used in a number of cases with gratifying results. It was generally preceeded by bleeding. In one hospital many of the cases of thermic fever were bled as soon as they were recieved, the patient being rubbed with ice meanwhile, and afterward put into the bath.—Medical News.

The Influence of Operation Per Se.

All surgeons of experience will have observed, and all readers of medical litature will be familiar with the fact, that not infrequently operative interventoin is attended with results of a successful nature that cannot be attributed directly to the measures practiced—in fact, sometimes only the preliminary steps are taken—but must be ascribed to some obscure action arising out of the exposure to light and air and other physical and mechanical influences; or else they must be considered coincidental. That such results are merely coincidental would seem negatived by the frequency of their occurrence; and for the present we must accept the fact and await the explanation. Perhaps the most conspicuous illustration of the condition under discussion is the subsidence of the symptoms of tuberculous peritonitis after abdominal section, with or without considerable manipulation of the serous membrane or irrigation of the abdominal cavity. In the same way, after operations on the skull for the relief of epilepsy, in which no obvious lesion is found, the attacks may for a long time remain in abeyance. At times, also, the exposure of supposed malignant neoplasms that are found to be insusceptible of extirpation is sometimes followed by a cessation of growth and possibly a long period of latency. Of this last condition a most instructive instance is reported by F. B. Jessett,* in which, following gastrojejunostomy for the relief of vomiting and other symptoms associateted with the presence of a tumor the size of a small cocanut, completely occluding the pylorus and presenting the naked-eye appearances of a scirrhous carcinoma, the patient lived for eleven years, and on postmortem examinati n the tumor previously present was found to have disappeared. The patient was a woman, 56 years old, who had lost flesh rapidly and had suffered from intense pain. The tumor remained demonstrable for a long time after the operation, though gradually diminishing in size. Death resulted, as stated, after an interval of eleven years, from apoplexy, and on autopsy the stomach was found to present typical hour-glass constriction about its centre, being adherent in this situation to the left lobe of the liver. At the constricted portion of the stomach the opening between the two resulting pouches barely admitted oné finger. In addition to the communication artificially established at the operation, the pylorus, which was situated immediately behind the constriction, was still patulous, though somewhat constricted. A somewhat similar case has been reported by Demoulin and Tuffer,† in which a hard swelling as large as an orange and thought to be a malignant growth developed in the epigastrium. On operation a tumor that felt like a fatty growth was found about the pylorus and the adjacent parts of the stomach, and gastroenterostomy was performed, On the twentieth day after the operation the tumor could no longer be felt on palpation and he regained his usual heath.—Journal of American Medical Association.

*Lancet, April 6, 1901, p. 1005.

The Pathology of the Jews.

The exceptional fertility of the Jews and their low mortality are shown in Hoffman's statistics for eighteen years in Prussia. The mortality was 21.61 per cent., while among the rest of the population it was 29.61; the increase during the same period was 34.75 per cent.; in the rest of the population, less than 28 per cent. The excess of boys over girls is another feature of their physiology. Schwimmer found in Austria that 128.5 boys were born to each 100 girls, while the usual proportion is 105.8. The nervous system seems to be the locus minoris resistentiæ among the Jews. The official report for Prussia and Bavaria for the year 1871 showed that there were nearly twice as many Jews among the blind, deaf, dumb and insane as from the remainder of the population. Progressive paralysis and postpuerperal mental disturbances are more frequent; and, in Russia at least, trachoma, myopia, cutaneous affections and abdominal diseases. Affections of the respiratory passages are less frequent among the Jews. Recent military statistics showed that consumptives in the army were in the proportion of 1 Jew to 22.3 Christians and 1.7 Mohammedans, Eminent Jews in the profession of late years are Traube, Heidenhain, Henle, Cohnheim, Bernstein, Senator, Liebreich, Saenger, Freund, Jaffe, Schreiber, Mendel, Hirshberg, Zuckerkandl and Meynert.—Journal of American Medical Association.

The Dietetic Value of Sugar.

H. Willoughby Gardner.—From the statistics Gardner finds that Great Britain and the United States consume a larger amount of sugar, *per capita* than any other countries and he attributes to this the vigor and robustness of the Anglo-Saxon race. He goes over the dietetic facts in regard to sugar, showing that it is a muscle food, and

†Bull. et Mem. Soc. de Chir. de Paris.

that it should be used in cases of fatigue; Aldine climbers and Arctic travelers find its use advantageous. During the past year he has strongly recommended sugar to patients who he thought would be benefited and has been greatly pleased with the results. He mentions a case where it apparently rehabilitated a case of seemingly advanced phthisis after influenza followed by pneumonia and in which the symptoms quickly disappeared after giving 4 ounces per day of pure cane sugar, not counting jam and cakes, of which the patient took freely. The objections to the diet are mentioned; its effects on the teeth he thinks are due to the impurities and not to the sugar itself. Alimentary glycosuria should be watched out for and it is well to test the urine during the treatment. In the case of a child with disorders of the mucous membranes it would be contraindicated, as well as in decided diabetes and glycosuria. In gout and rheumatism, he is inclined to think that the prohibition of sugar in the latter may be only due to prejudice. In gout the condition is more clear. Those who are gouty and fat should avoid sugar like poison, as they cannot utilize fats and carbohydrates, but those who are gouty and thin are in a different category. One must limit their nitrogenous food, but may give them sugar and starch without much fear. There are many who do not fall distinctly in either class, and their diet must be determined experimentally and may have to be varied from time to time.—Journal of the American Medical Association.

La Grippe in Children.

Quinine is said to be deadly to the influenza bacillus, yet many writers oppose its use during any stage of the disease. Despres recommends sprays of chloroform-water, 5 to 1,000. Others advise spraying the nose with normal saline or boric acid solution, then anointing with mentholated vaseline 1 to 10. Infants can safely nurse mothers with grip, but must not be fed from a spoon or cup used by the mother. The internal treatment consists of

℞ Liq. ammon. acetat. / Vin. mariani \ aa. gm. 60.0 (℥ij)

Sig. A tablespoonful in hot, sweetened water or lemonade every two hours.

For the later muscular aches and pains lactophenin and salol are effective. The pulmonary system may be stimulated with ammonium carbonate and nux vomica in small, frequently repeated doses. Bronchial adenitis requires some such remedy as iodide of iron arythmia and tachycardia require sulphate of sparteine, gm. 0.0075-0.015 (gr. $\frac{1}{8}$-$\frac{1}{4}$), and angina pectoris demands nitro-glycerine or nitrate of amyl. If paroxysmal tachycardia is to be prevented, the digestion must be carefully looked after. Ear troubles must be treated early. —M. P. Hatfield in "The Acute Contagious Diseases of Childhood."

Treatment of Tuberculosis.

Klebs (Munch. Med. Woch., No. 49, 1900), impressed with the uncertainty of the treatment of tuberculosis in sanatoria, recommends the continuance of attempts to arrive at a satisfactory causal treatment. The method which he now uses is the injection of the zymases of tubercle bacillus cultures, "tuberculocidin" and "antiphthism," which he has found capable of arresting an experimentally-produced tuberculosis in guinea-pigs and rats. Clinically he has used this method in tuberculosis of the lungs and other organs. In phthisis he is able to record improvement in 78 per cent. of the cases, and marked improvement in 60 per cent. The most satisfactory results have been obtained in the younger patients, and especially in cases of scrofulous adentitis. Administration by the mouth had the advantage of being better tolerated, and followed by less febrile reaction than injection. External application is efficacious when the disease affects the skin, and intra-articular or peri-articular injection where the joints are concerned.—British Medical Journal.

The Stockholm Dagblad (Medical Age.) states that it has taken four years to realize and bring into shape the vast estate of the inventor of dynamite to comply with the conditions of the will, in regard to the endowment of the famous Nobel prize, each of which is a fortune in itself. It is anticipated now that the five prizes can be awarded in 1901. Physicians are interested, as one of the five is for "progress in medicine." No notice will be taken of personal applications. The committee in charge of the physics and chemistry prizes has already requested suggestions from the professors of these sciences at the principal universities of the world, including Rome, Leyden, St. Petersburg, and Chicago.

The Medical Department of the University of Buffalo is in recipt of a gift of $50,000 for the purpose of erecting a labatory to be devoted entirely to research work. It will be known as the Gratwick Research Laboratory.

Infant Feeding.

The rapid cooling of milk with proper aeration, following strict cleanliness in its production, are the essentials for pure milk. Such milk sent from this country to the Paris Exposition was sold these as fresh milk. Chemical preservatives and sterilization are harmful, but heating to 170 deg. F. will destroy most of the bacteria without hurting the milk At 50-60 deg. F., nine-tenths of the butter-fat rises to the top of a bottle of milk in twelve to twenty-four hours, so that the upper nine ounces of a quart bottle will contain all the cream, and the percentage of fat to proteids will be three to one. This is about the proportion in human milk, so it is only necessary to dilute this and add sugar to approximate the proportions in human milk. A milk containing about 4 per cent. of fat will give in the first nine ounces 12 per cent. of fat, 4 per cent. of sugar and 4 per cent. of proteids. This, diluted three times, gives fat 4 and proteids 1, and by the addition of one part of sugar to each twenty of the dilution, makes the sugar 6, about the composition of human milk, A milk containing 3 per cent. of fat yields in its upper nine ounces, 9 of fat and 3 of proteid, while a 5 per cent. milk gives 15 fat and about 4½ proteid· The proteid of cow's milk, however, makes hard coagula, not easily penetrated by the digestive fluids, while the curd of woman's milk is soft. But cereal decoctions have been found to make the curd of cow's milk soft, so the author uses for dilution a dextrinized wheat, barley, or oatmeal gruel, He dextrinizes it by adding diastase or a malt extract made by soaking a tablespoonful of malt barley grains over night in two tablespoonfuls of water in a refrigerator.—H. D Chapin (American Journal of Obstetrics, May, 1901.)

Sponges in Abdominal wounds.

In the case of a surgeon who was used for malpractice, because the head-nurse of a hospital who was personally in charge of the sponges at an abdominnl operation forgot that one had not been removed before the wound was closed, a verdict was given acquiting the surgeon of blame, but the matter has aroused further interest because it is now sought to prove that the hospital employing the nurse is responsible. He would be a rash man who counted upon the Law Courts acquiting a surgeon who was aware that a nurse assisting at an operation was in any way careless, but it certainly would be manifestly unfair to hold an operator responsible for the acts of a duly qualified nurse on the ground that she was technically the surgeon's agent. A new terror will be addded to the life of a hospital surgeon if he is to be held accountable for whatever may happen to his patients in consequence of the shortcomings of the nurses on whom he must depend in his work.—Medical Press and Circular.

The Remarkable Travels of a Foreign Body.

Among the noteworth accounts of the migrations of foreign bodies with the organism we may include the following, by Dr. Capurro, of Genoa, (Clinical chirurgica, 1899, No. 11; Centralblatt fur Chirurgie, June 15: "A girl baby, seven months old, fell ill and made painful efforts at swallowing. In her course of a few days there were cough and fever, and in two weeks an abscess formed in the right tenth intercostal space, in the posterior axilliary line. The next day there was a suffocative attack, which subsided on the child's vomiting a considerable quantity of yellowish-green pus. The abscess, which was opened at once, contained similar material. It healed, but two weeks later a new abscess pointed above and in front of the first. When it was opened, a head of *Brachypodium vulgare* (a forage grass of the tribe *Festuceæ*) more than an inch long was extracted.—N. Y. Medical Journal.

Foul Breath.

The teeth should be thoroughly cleansed, the gums sponged with myrrh and water, and one of the following allowed to dissolve in the mouth:

℞ Pulv. cinnamomi.		
Pulv. cardamomi	aa	gm. 2.0 (℥ss)
Pulv. pimentæ.		
Sach. alb.		4.0 (℥i)
Mucilag. acaciæ		q.s.

Make fifty pills.

The digestive functions should be regulated, bad teeth attended to, and the mouth washed after meals with

℞ Thymoli		gm. 0.5 (gr. viij)
Sod. borat		2.0 (gr. xv)
Aqua, ad		c.c. 500.0 (Oj)

—E. E. Walker in "Reference Handbook of Medical Sciences."—Medical News.

The Sterilisation of Silk Catheters.

M. W. Herman (Centralbl. f. Chir., January 19th, 1901) states that if silk catheters are boiled in plain water they soon become rough, cracked, and totally unfit for use. If, however, they are boiled in a saturated solution of ammonimum sulphate

they remain unchanged. Boiling for three to five minutes in the solution is sufficient to sterilize extremly dirty catheters, but they may be boiled for five hours and retain their polish. The only change is that they become more elastic, and are therefore improved. After being removed from the solution they may be lubricated with vaseline and used immediately, without being dried, since the solution of ammonium sulphate does not irritate the mucous membrane. Nelation and elastic catheters may also be sterilised by boiling in the same solution.

Significance of the Stomach Splash.

Splashing in the stomach has often been given as a sign of atony or dilatation. Hans Elsner (Berl. klin. Woch., April 22nd, 1901) has tested the meaning of the symptom amongst J. Boas's patients, and find that for diagnostic purposes its value is very limited. In fact, in cases of gastroptosis, and therefore especially often in women, splashing is of no diagnostic importance at all; it may occur in any condition of gastroptosis, even when the patient is fasting. Stomach splashing can only doint out gastric atony when there is no gastrotopsis, and when it occurs seven hours after a test meal, or when the patient is fasting; even in these cases, is a door symdtom, it is only a door substitute for the results of examination by emptying the stomach with a tube. British Medical Journal.

The Destruction of Mosquitos.

The Division of Entomology of the United States Department of Agriculture has (as we learn from the New York Medical Journal) issued a circular concerning mosquitos and fleas. The circular bears the signature of Mr, L. O. Howard, an entomologist whose special compotence in the matter is acknowledged throughout the scientific world. While recognising that the thorough screening of windows and the use of the bed net are the best means to employ against the access of mosquitos in dwellings, he makes suggestions as to the destruction of these mosquitos which, in spite of these measures, do inflict their bites even in the best regulated families. Thus he points out that the slow burning of cones made of moistened pyrethrum powder gives great relief from the attacks of mosquitos in a room; it does not, however, kill the insects, but is only a palliative. Mosquitos found on the ceiling of a bedroom may be killed easily and quickly by placing under them a shallow tin vessle nailed to the end of a stick and moistened on the inside with kerosine. But the most satisfactory means of fighting mosquitos is to destroy their larvæ or abolish their breeding places by draining ponds and marshes, by stocking pools with fish, and by the use of kerosene on the surface of the water. Approximately, an ounce of the oil to every fifteen square feet of surface is sufficient, and generally the application need be made only once a month, Mr. Howard doubts. however, if it will prove feasible to treat extensive salt marshes in this way. Cesspools, cisterns, etc., should be treated in the same manner. If drinking water is drawn from the bottom of a tank, as is commonly the case, there is no objection to coating the surface of the water with kerosene. In the matter of tanks, cisterns, cesspools, etc., there should be concerted action in a district, for a family may suffer from their neighbor's mosquitos.—British Medical Journal.

Cystic Degeneration of Cervix in Young Women.

Findley (Amer. Journ. Obstet., Feb., 1901) attended a severe case of menorrhagia in woman, aged 23. The excessive flow had lasted for seven months. For the last four weeks there had been continual metrorrhagia. The cervix was dilated under chloroform. Just below the internal os were cysts about an inch in diameter attached by a broad base to the cervix. That part of the uterus was split up both anteriorly and behind in the median line and then amputated. On the right side the cystic degeneration involved the whole muscular wall of the cervix; on the left it was less extensive. The cysts were lined with the epithelium found in the cervical glands, and Finley held them to be retention cysts. The uterus was apparently the seat of fungous endometritis, possibly malignant. It was no doubt this complication that was the chief if not the sole cause of the menorrhagia.

Deaths From Heat Prostration in Brooklyn

The number of daily deaths from heat prostration during the recent elevation of temperature were 257 out of a total mortality of 930. While these figures undoubtedly include many cases in which other causes were largely contributory, they may be taken as a fair index of the part played by the heat in the greatly increased mortality.

Wild Beasts in India.

A correspondent of the Indian Medical Record makes a vigorous protest against the Indian Forest Department's regulations, under which the extirpation of the homicidal wild beasts that infect that country is made impossible. He says the government forests and the game laws are practically responsible for the loss of thousands of human lives, and the ruin of cultivators, all for the benefit of a certain revenue and the sporting proclivities of a priviliged class. Shooting privileges are strictly restricted and the consequence is the wild beasts multiply. Owing to these laws he says some sections have become depopulated. The cultivator must not kill the animals that ravage his fields or endanger his own life and destroy his domestic animals. therefote, villages are abandoned and become overgrown with jungle, thus increasing the evils. There may be some reasons for forest preservation, but authorities who make and enforce laws that cost thousands of human lives needlessly, or for the sake of gratifying the sporting proclivities of a class, take upon themselves a serious responsibility. The few thousand lives annually taken by wild beasts may be a very small proportion of the two or three hundred million of India's population, but there is no excuse for their loss if it is in any way due as charged to special regulations made for the amusement of a privileged class. The Indian peasant needs protection against himself with his heathen zoophilism, and it is a pity that his civilized masters should add to his perils for the sake of their own recreation.—Journal American Medical Association.

The Unsentimental Nurse.

The trained nurse is a much belauded personage, especially in her graduation addresses, but she also comes in for her share of criticism. Dr. Malcolm Morris and others find her often concieted and too unconscious of the due subordination she owes to the medical profession, of which she is a sort of useful parasite. Others have criticised also, but in a recent issue of a lay journal we find even her merits, from a physician's point of view, are taken exceptions to by those who endure her ministrations, It objects to her noiseless efficiency, her conscientious regularity, her simulated amiability, her mechanical perfection in the performance of duties; her emotional impassibility, it says, spoils all the pleasures of illness; the patient can make no appeal to her sympathy and she only aggravates his irritability. What the average inexperienced male "who wants to enjoy the pleasures of illness," desires, the newspaper says, "is a ministering angle with actual human sympathies, whose feelings will be touched by human suffering, whose gentle hand will smooth the pillow and cool the fevered brow, and that sort of sentimental thing," not a self-contained and unimpressionable female, as methodic as a machine and "as dead to his personality as a wooden Indian." Personally, we do not know what the pleasure of illness is, something, we suppose, like the dying of a rose in aromatic pain, etc., but we can appreciate the nurse's position when in unavoidable attendance upon a patient of that type, so far as our fancy can produce him. It may be that some nurses are wooden in their ways and unobtrusive in their lack of sympathy. If so, it is an error, but one that is on the whole less likely to do mischief than the opposite extreme. To be a philanthropist, as Dr. Sevier says, one must be cold-hearted, and most certainly an inflammable-hearted female philanthropist in a hospital, or even in a sick room, is a dangerous thing. When a nurse can, with all her other requirements met, steer clear of the Scylla of emotionalism on the one hand and the Charybdis of indifference on the other, she is a wonderful creature, common as she may be, and then if she is still criticised one ought to love her for the enemies she has made.—*Journal American Medical Association.*

Preventions of Illegal Trade in Narcotics.

To prevent the illegal and ever-increasing sale of narcotics in the downtown district, the First District Auxiliary Association of Pharmacists has been formed. The sale of cocaine and morphine in the levee district has greatly increased during the last year, and it is estimated that more than three hundred ounces of the former drug are sold monthly to persons addicted to its use. This is procured without physicians prescriptions, or other authority, the statutes governing its sale being openly violated. Apathy on the part of the City and State officials is said to be the cause of the laxity of the druggists. A committee was appointed to investigate the matter. A more rigid adherence to the provisions of the new State Pharmacy Act, pertaining to registered and competent assistants, also will be required by the Association, and the assistance of the State's Attorney will be asked for its endorsement.—*Medical News.*

Cost of Opium Smoking.

One million dollars' worth of "opium prepared for smoking" comes into our ports annually, according to the World. This amount, considering the activity of opium smugglers and the ease of carrying tiny packages of the drug, probably does not represent one-half of the total amount of such opium brought into our country each year.

Fifteen years ago the total amount of "crude, liquid preparations of, and 'opium prepared for smoking,'" which passed through our Custom-House was valued at $1,250,053. The amount of "opium prepared for smoking" was $335,383 worth. In 1900 the total amount of opium imported was valued at $2,076,939, and $938,524 worth of that amount was opium used for smoking.

These figures show an increase in the last fifteen years of $826,886 in value of total import and an increase of $603,141 in value of imported opium for medicinal purposes are imported by wholesale drug companies and distributed in the form of morphine, laudanum and opium tablets to druggists. Opium prepared for smoking is imported by private individuals, mostly opium-smokers or who wholesale it to small drug shops where it can easily be purchased by persons desiring it, although there is a law prohibiting its sale except on a certificate from a doctor.

The opium habit is not confined to the smoking of opium. This form claims comparatively few victims. A greater number chew gum opium or eat the opium tablets, while a vastly greater number still use the drug in the form of morphine injections.

Among morphine victims women probably predominate. As a rule women have more leisure time than men, and this habit cannot easily be continued by any person regularly employed. A man may drink to a degree and yet pursue a regular business, but opium or morphine deadens the mind and saps the energy, rendering a man unfit for anything except to sleep and dream.—*The Public Health Journal*

Pneumothorax.

If intensely severe symptoms attend the perforation, a hypodermic of morphine should be given immediately. It relieves the mental distress, checks cough, and lessens the dyspnea. If there are marked signs of shock, and cardiac failure threatens, ether should be injected hypodermically at intervals. The movements of the affected side may be retained, and overdistention prevented by broad adhesive straps extending beyond the median line both before and behind. The engorgement of the right side of the heart requires its own special treatment. It sometimes happens that severe dyspepnea disappearas spontaneously on the occurance of pdeumothorax. When a valvular opening in the lung allows the pleural cavity to so fill with air that the lung is compressed. A cannula should be insereed in an intercostal space and left till the lung is healed. Cases of tubercular pyopneumothorax do badly after free incision. A good treatment for these cases is to place patients on the back at the edge of the bed, and to insert two hollow needles with rubber tubes attached, one in the anterior chest and other in the posterior. The anterior tube comes from a large bottle of warm boric-acid solution prepared with sterile water, and the other tube is connected with an aspirator or drains into a basin on the floor. The fluid runs from the chest and is replaced by the boric solution. When the stream runs quite clear, the anterior needle is withdrawn, and as much as possible of the remaining fluid removed. If the accumulation of air causes trouble, it may be removed in the same way as fluid, by aspiration. Ordinary pyopneumothorax requires the same treatment as empyema.—*Medical News.*

Did Napoleon Die of Cancer?

The belief is very general that the cause of death of the great Napoleon was cancer, and it is generally belived that cancer was in the family. Dr. Baudouin has lately published in the Gazette Medlcale de Paris some clinical remarks on the death of Napoleon I., and the conclusion he arrives at, apparently on perfectly reasonable grounds, ie that the great Emperor suffered from an ulcer of the stomach, which caused death by perforation. Undoubtedly hæmatemesis was present as a symptom, and at the autopsy there was no hypertrophy of the liver nor any signs of cancer, but a gastric ulcer which had perforated was found near the pylorus. The whole controversy exemplies very clearly the extreme difficulty of correcting a mistake of this kind. It will be remembered that Napoleon's last illness was of about four years' duration, and this time would fit in with the diagnosis of cancer, though it is undoubtedly true that a competent authority diagnosed chronic hepatic disease and later abscess of the liver; but Dr. Baudouin believes this to have been a peri-hepatitis due to extension from the existing ulcer of the stomach.—*Medical Press and Circular.*

Proposed Slaughter of the Innocents.

A Denver despatch states that a prominent member of the Colorado State Medical Association introduced at the annual meeting of that society, held recently, a proposed legislative enactment providing that, on the application of the parents, imbecile children be painlessly put to daath. The proposed law is too wishy-washy. The children should be killed, whether the parents consent or not, and the latter also had better be put out of the way lest they procreate other children of feeble intellect.—*Record.*

Automatic Safety-Valve Stopper---A Device Preventing the Bursting of Peroxide of Hydrogen Bottles.

The great trouble with peroxide preparation is that if the containers are tightly corked, the oxygen which separates and is set free, slowly but constantly as time passes, accumulates, until the bottles can no longer stand the pressure and burst, or the corks are driven out. Of the two alternatives, the bursting of the bottles is the most objectionable feature on account of the danger attached to it.

Containers of the hydrogen peroxide, U. S. P., which is a weak solution of H_2O_2, yielding but 10 volumes of oxygen, may be closed with a wooden stopper, which by the porous nature of the material, permits

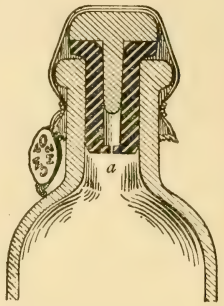
(a) Puncture.

Cut No.1 Illustrates the cross section of the safety valve rubber cork, showing the wooden top and the puncture at the bottom. A thin strip of paraffined paper is inserted into the puncture.

the escape of the gas almost as soon as it is set free, thus avoiding explosion and rupture of the bottles or the driving out of the corks.

While these wooden stoppers answer very well for solutions of H_2O_2 responding to 10 volumes of oxygen or less with stronger solutions, such, for instance, as Marchand's peroxide of hydrogen medicinal (15 volumes), or his hydrozone (30 volumes of oxygen) they are quickly attacked by the solutions, as are also the ordinary corks, and within four months are completely oxidized, not merely bleached, but rendered so soft that they cut like pot cheese. From that time the goods are unfit for sale.

In order to prevent these difficulties and especially to obviate the bursting of the bottles containing hydrozone, Mr. Marchand, the manufacturer of that article and other well-known brands of peroxide of hydrogen, has devised an ingenious stopper



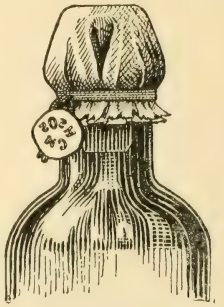
(a) Puncture.

Cut No. 2. Illustrates the cross section of a bottle corked and capped with vegetable parchment and paraffined muslin: no wire.

which he calls the "automatic safety-valve rubber cork," and which is shown in the illustration.

The material of the stopper is vulcanized rubber. The beveled end is punctured through in such a manner that when the pressure in the bottle rises above 5 to 8 pounds to the square inch (according to the thickness of the rubber at the bottom, which may vary slightly), and excess of free oxygen finds free egress and thus relieves the tension.

This device is first inserted, and a plug of porous wood is then driven in, thus



Cut No. 3. Illustrates the top of the bottle with the seal.

stiffening the rubber and completing the operation of "corking."

The capping consists of vegetable parch-

ment covered with paraffined muslin, no wirinfi being used or needed.

In is easily seen that this style of closing the bottle obivates the possibility of bursting. Assuming even, that through some imperfection of the stopper, the puncture should close, as soon as the pressure rises to a point far within that required for rupture of the bottle, the stopper, not being wired down, will yield and be forced out.

Retail druggists who have for so many years been the chief sufferers and losers from the bursting of the peroxide containers, and the deterioration of the substance otherwise from the causes indicated above, will welcome Mr, Marchand's invention as a happy solution of what has to them been a very serious problem in the past, since it will enable them to supply their trade with the higher solutions of hydrogen peroxide, and especially that preparation of Marchand's, for which the stopper was particularly designed, "hydrozone," which carries 30 volumes of oxygen.

The device described above—the automatic safety-valve stopper—having entirely obviated the danger arising from the explosion of bottles in handling, there is certain to be a largely increased demand for Marchand's concentrated solutions of the peroxide of hydrogen (which alone will be corked with the patented stopper), since physicians anxious to obtain quick results will never prescribe anything but the most active solutions, or those richest in active oxygen, and since druggists will be protected absolutely against loss by deterioration or explosion. The medical profession is being thoroughly advised of Mr. Marchand's new method of closing his bottles of "peroxide of hydrogen medicinal" and "hydrozone," and will be certain to avail themselves of the advantages thus guaranteed them.—April 1901 issue of *National Druggist of St. Louis.*

NOTE.—Remember there is no popping when corkr are removed.

Typhoid Fever.

LURAY, Kan., Nov. 21, 1900.

SALO-SEDATUS CHEMICAL CO.,
St. Louis, Mo.:

GENTLEMEN:—Some five or six years ago I had my introduction to the use of Salo Sedatus. My attention was first called to it by a physician of St. Louis, Mo., after which we had an epidemic of scarlatina. I was first called to see a patient that had been unconscious for twenty-four hours, a boy eight years old, with a temperature of 105.5 degrees F. After administering the third dose of Salo-Sedatus temperature dropped to 101.5 degrees F. Child was conscious from that time on to convalescence. With regard to the treatment of typhoid fever, Salo-Sedatus, as a sedative, excels anything that I have ever used in my practice. Among the army of men struums for combatting typhoid diseases, Salo-Sedatus as an antipyretic heads the list in my estimation. I will now give you my method of treatment of typhoid fever. First, as a sedative, Salo-Sedatus. Second, something to open the bowels and act on the liver. Leptandrin, in 8 grain doses, every four hours until the bowels act freely. Third, an intestinal antiseptic. Sulphocarbolate of zinc trituated with bismuth subnitrate. Fourth, to control hemorrhage, use F. E. hamamelis. As for hematuria, I have no use for any other remedy if Salo-Sedatus is used from the first.

Very truly yours,

DR. V. FRITTS.

Hints as to Care of Infants.

1. Give a baby plenty of water four or five times per day.
2. Give a baby a rockless bed to itself.
3. A baby should be held only to be nursed
4. Massage and exercise a baby each day.
5. Give a baby a chance to lay naked and kick daily.
6. Never give a baby diluted alcohol, liquors or coffee; it will acquire perverted appetites soon enough.
7. Teach a baby to hang by its hands and spring with its legs.
8. Don't advise a parent to give the baby a little soothing syrup, paregoric or castor oil; in short, do no off-hand prescribing at all.
9. If the mother is weak or anemic, correct any lesion and give her calcium hypophosphite 5 to 20 grains per day; thus via milk nourish baby.
10. If the baby is constipated give the mother sodium phosphate q. s.
11. Ventilate sufficiently and keep temperature below 75 deg. F.
12. A cart load of sand makes a healthful plaything for a baby.—*Atlanta J.-R. of Medicine.*

According to the report of a committee of the Hundred Year Club, the two oldest person now living are Izai Rodefstyp, of Moscow, Russia, who is in his 136th year and Mrs. Nancy Hollifield, of Battle Creek Mich., who is 117.

Professor Behring has lately been the recipient of a Prussian title of nobility.

Syphilitic Fever.

The fact that physicians do not seem to be sufficiently alive to the general fact that syphilis may be the cause of obscure forms of fever, which yield only to proper anti-syphilitic treatment, leads Futcher to report three interesting cases of this kind. The most obscure cases of this category are those in which there are no evident outward manifestations of syphilis. Futcher points out that fever in syphilis sometimes, though rarely, occurs so long as three or four weeks before the appearance of the eruption; it may occur just previously to or coincident with the secondary eruption, constituting then the so-called "fever of invasion"; and the fever may come on at any time during the secondary or tertiary stages. In one of Futher's cases it appeared twenty-nine years after the initial lesson. Syphilitic never may be continuous and mild, of a remittent type, and of a definite intermittent tyde, being often mistaken for malaria, typhoid, sepsis, etc. Janeway has cited a number of cases of syphilitic fever which had been diagnosed and treated as tuberculosis, some of the patients having been sent to sanatoria for the tuberculous, and yet the fever and other symptoms promptly disappeared with specific treatment. Enough has been said to emphasize that all cases of fever of obscure orgin should be studied with syphilis in view. Evidences of tertiary lues should be sought for in such obscure fevers the exact cause of which is absolutely known.—*Journal of the American Medical Association.*

The Recognition of Early Tuberculosis.

At the recent meeting of the Association of American Physicians, Edward L. Trudeau (Saranac Lake), read a paper on the importance of a recognition of the significance of early tuberculosis in its relation to treatment. The search for the tubercle bacillus should be begun early and continued as long as the symptoms remain obscure. The absence of the tubercle bacillus from the sputum is not conclusive evidence of the absence of the disease, particularly in its early stages, and too much stress should not be laid upon a negative result. The tuberculin test is of value in reaching a conclusion when the bacilli are not found. The results of the tuberculin test are most reliable when the patient has no fever. Early diagnosis is of the first importance in the treatment of the disease because it is in the incipient stage that the greatest amount of good can be done. Although the open-air treatment of tuberculosis gives renewed hope to physician and to patient, disappointment will result unles the importance of early diagnosis is realised. In answer to a question by McPhedran (Toronto), the author said that a regular rise of temperature to 99.5 deg. at a definite time of day is of significance in a case of suspected tuberculosis. A Jacobi (New York) said that mouth temperature in cases where accuracy is a desideratum is unreliable. Rectal temperature is the only one that can be absolutely relied upon. Even in the rectum there is a difference of ½ deg. between the lower and the higher portions of the rectum. Rectal temperatures of 99.5 deg. are normal. Some cases with prolonged expiration and impairmeut of reasonance are due to interstitial pneumonia of long duration. Trudeau said that in a case such as cited by Jacobi the tuberculin test would give conclusive demonstration as to the nature of the disease. He begins to inject 1 mg. of tuberculin for diagnostic purposes then gives 3 mg., and finally 6 mg. In surgical cases it is often necessary to use between 4 and 15 mg.—*British Medical Journal.*

Proper Credit to the Newspapers.

The newspapers are as a rule pretty poor exponents of medical science. The fact however should not be lost sight of that they are a tremendous engine of education, good, bad, and indifferent. The main good that they do in teaching the people medical facts is in popularizing knowledge of preventive medicine. Just now the mosquito theory of the transmission of malaria is occupying a good deal of their attention. Along the same line an editorial article in the Cincinnatti Times-Star treats of the fly as a bearer of germs of all kinds. The editor speaks of the fly, curiously enough, as the "black fly," by which he probably means not the pest of our northern states known by that name, but the ordinary house-fly. It is pointed out that flies carry typhoid and other germs to food and drink, and that they are bred in filth. Diseases taken about by fles may really be classed with more or less justice as filth-diseases. The editor makes a strong plea for the extermination, so far as possible, of flies as well as mosquitos. It is well known that flies breed in manure, and that stables are especially infected by them. With better cleaning of the streets, and with bicycles, automobiles, and motor cars largely in use, ought to have a very good start in the direction of suppressing the fly evil.—*Cleveland Journal of Medicine.*

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ANTIPYRETIC, DIRURETIC, DIAPHORETIC,
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SPECIFIC IN FEVERS AND ALL INFLAMMATIONS.

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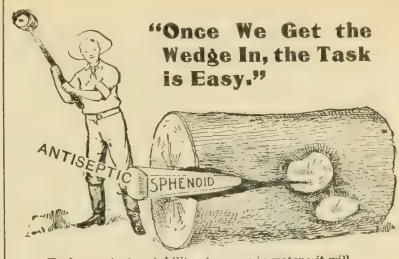

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Tuberculosis and Emigration.

It is stated in the American journals that the recent order excluding sufferers from tuberculosis from the United States is the result of a ruling on the subject asked for in consequence of a declaration by the Surgeon-General of the Marine Hospital Service that pulmonary tuberculosis is a dangerous contagious disease. On the strength of that pronouncement the Superintendent of Immigration was instructed to issue an order that in future immigrants affected with tuberculosis of the lungs must be debarred from all ports of the United States regardless of Boards of Special Inquiry which heretofore have used their discretion in the matter. Formerly the Board of Special Inquiry at the port of New York, after receiving the report on a case of tuberculosis from the Chief of the Medical Division of the Immigration Service, could exercise discretion as to the admission of the person, and, according to the Medical Record, there have been instances in which a child ill of the disease has been permitted to land with its parents. Henceforth no one suffering from consumption will be admitted to the United States. The rule will apply also to alien passengers in the first and second cabins as well as to those in the steerage.—*British Medical Journal.*

Treatment of Ulcers of the Leg.

O. Schulze (Munch. med. Woch., March 19th, 1901) regrets that the introduction of new remedies so often causes old ones to be put aside. He has tried a large number of drugs as applications for the treatment of ulcer of the leg, and comes back to the opinion that none give such good results as camphor. He usually prescribes: Camph. trit. 3ss; zinci oxyd. 3vijss to x; adeps ad 3vi; or camph. trit. 3ss; zinci oxyd. 3iij; ol. olivæ ad 3iij. The treatment can be carried out without insisting on the patient lying up, He claims that these applications will nearly always lead to the healing of the ulcer.—*British Medical Journal.*

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A Difference of Opinion.

The best way, when there is a difference of opinion between practitioners in regard to a case, is for them to have a fresh examination when both or present. It can be but seldom under such circumstances that they will fail to arrive at a common accord. Unfortunately, this course is not always practicable, nor is it usually resorted to even when it is. A regrettable difference of opinion became manifest at the Westminister Police Court last week in reference to the mental condition of a refractory young woman. The medical officer of the prison and the divisional surgeon both arrived at the conclusion that she was insane, and she was sent to the workhouse infirmary. There the medical officer decided that she was sane and discharged her, thus placing the magistrate in a somewhat difficult position. True' this difference of opinion testifies to the conscientiousness with which the various medical officers fulfill their responsible functions, but it interposes grave difficulties in the administration of the law, and means ought to be found of settling such questions without throwing the onus of deciding the sanity or otherwise of the accused on the magistrate, who is hardly fitted to decide which view is the correct one.—*Medical Press and Circular.*

The Treatment of Paralysis Agitans.

In a former number we noted an additional method of diagnosing the onset of paralysis agitans, and now it is of interest to find a contribution on the symptoms and treatment of this disease by Dr. R. L. Williamson in a recent copy of the Manchester Medical Chronicle. Recognizing that in the light of our present knowledge there is no treatment which can cure or even permanently arrest the progress of the disease, he has devoted a considerable portion of his article to a consideration of certion measures he has tried for the relief of the more troublesome symptoms. He strongly recommends that a patient should remain in the open air as much as possible, and has found that driving in an open carriage, in some cases, produces a temporary cessation of the tremor. He has tried a large number of drugs, but has found all of them practically useless with the exception of hyoscine, hydrobromate, duboisine sulphate, and hyoscyamine which he believes are of decided value. In using the first of these drugs he suggests that the initial dose should not exceed 1-150 gr. dissolved in 3ij of chloroform water. The quantity may be increased gradually up to 1-100 gr., and in some cases, when no toxic symptoms have appeared, he has given as much as 1-75 gr. or 1-55 gr. by the mouth. Dr. Williamson always uses Merck's hyoscine hydrybomate, obtained directly from Darmstadt. If hyoscine fails to relieve the tremor he suggests a trial of duboisine sulphate (1-64 gr. by the mouth) or by hyoxyamine sulphate (1-96 gr.), but as a rule these are not so efficacious as hyoscine hydrobromate.—*Medical Press and Circular.*

Beauty Making.

The desire for beauty on the part of the female is one of the most deeply-rooted characteristics of the human race. That it is answerable for a vast amount of folly and frippery goes without saying. Unfortunately the door is thrown open thereby for the host of harpies who fatten upon the foibles and weaknesses of mankind. In this way abound myriad specialits in baldness, in the destruction of superfluous hair, in the removal of fat, wrinkles, freckles, moles and blemishes of all and sundry kinds. To a certain extent the treatment of many facial defects, such as an everted eyelid or a disfiguring birthmark or scar falls within the limits of legitimate surgery. But the value of such procedures is ascertainable upon a moderate and well-defined basis. The claims of the quack, on the other hand, are boundless, and would be ridiculous to any but a woman whose judgment was swamped by an overwhelming desire for sexual attractiveness. A New York lady, so it is announced in the Daily Express, has brought an action for £12,000 damages against some operators who undertook to restore the youthful contour of her face, to make a dimple in her chin, to raise the drooping eyelids, to draw back the skin and make it smooth on the forehead, to redden her lips, and straighten and point her nose. It will not surprise any practical surgeon to learn that a series of operations to fulfil that extremely large order resulted in making the lady plainer than ever, with the addition of numerous scars. It is to be hoped that the publication of this distressing case will stay, for a time, at any rate the hand of the professional beauty-maker.—*Medical Press and Circular.*

Naphthalan is the substance which Voges calls an antitoxin for mosquito bites. He states that its action on the poison from the bite is as effective and specific as that of an antitoxin on the bacterial toxin. Voges is at the head of the National Department of Hygiene of the Argentine Republic.

The Battle Creek Sanitarium

Is a place where chronic invalids, especially those suffering from the various form of indigestion, diseases peculiar to women, constipation, chronic malarial poisoning, anæmia, obesity, the uric acid diathesis-neurasthenia, migraine, and similar ailments are trained into health by the aid of systematic regimen, scientific hydrotherapy, massage, Swedish movements, Swedish gymnastics, and other rational means. Most cases of Bright's disease, diabetes, locomotor ataxia, and many other maladies which are incurable under ordinary conditions, are greatly improved by the combined use of rational remedies and systematic regime, and many are practically cured. Extensive bacteriological, chemical, and microscopical laboratories connected with the institution afford excellent facilities for accuracy in diagnosis and original research.

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THE SANITARIUM, Battle Creek, Mich,

Abnormal Clinical Forms of Pyloric Stenosis.

Bouveret (Lyon Med., April 14th, 1901) records examples of two abnormal forms of obstruction of the pylorus, stenosis without vomiting, and stenosis with periodic vomiting. In the first case his patient suffered from pyloric carcinoma for at least two years, and never vomited during that time. The stomach was for a long time much dilated. Besides an uncommon tolerance on the part of the stomach, the case was in part explained by the fact that from time to time at first at intervlas of some weeks, the patient was troubled with discomfort after food, foul tongue, and loss of appetite; and as soon as these symptoms appeared, he went to bed and abstained from all food for two or three days. In the second case the patient suffered from gastric intolerance for a few days each month. The attacks were exactly periodic, occurring once a month for a considerable time. The case was diagnosed as cicatricial contraction of the pylorus from old ulcer. Bouveret regarded the two cases as similar, the occurrence of the vomiting in the second case being due to the fact that the patient did not pay attention to the first signs of his gastric distension, but continued to eat and drink.

Three conditions favour the absence, rarity, and periodicity of the vomiting; (1) slightness of stenosis, (2) exceptional tolerance, and (3) reduction in the amount of food taken.—British Medical Journal.

Dr. Von Puyadon is of the opinion that red light favorably influences measles. It causes diminution of fever, a more rapid appearance of the rash, and a milder degree of desquamation. The red lights must be used at the beginning of the disease. Small red curtains are recommended.

Abortion.

R. Lowenhaupt (Die Heilkunde, February, 1901) describes the modern teaching of abortion (Part II). The treatment of threatened abortion comprises rest in bed, mental rest, bland diet, and regulation of bladder and rectum, and either an expectant treatment may be adopted, leaving the local condition rigidly alone lest fresh foci of injection are produced; or the uterus may be curetted and packed, or a total extirpation of the uterus may be undertaken. He does not give much hope for success by the first two methods, and he speaks very guardedly of the severe surgical undertaking. The last, he says, must always present a great difficulty in choosing the time, so as to be performed neither too early nor too late; the infiltration must not have extended beyond the limits of the uterus. In antistreptococcus serum he says that he is disappointed, and that he cannot look upon it as curative medication. Crede's ointment is also mentioned, but he considers that there is not enough data to hand yet to enable one to judge its merits. Alchol, caffeine, strychnine, and larg doses of secale or ergotine, as well ss intravenous injections of saline solution, are the general remedies he recommends. With regard to the prophylaxis of abortion, he considers that the treatment of general conditions—for example, syphilis—sometimes by keeping the patient at rest during the early months of pregnancy, by the proper treatment of each pregnancy and lying-in, are among the most important preventatives; and he mentions intrauterine injections with carbonate of soda solution followed by rest; and, if an abortion has occurred, he considers it of use to swab the uterus out with tincture of iodine (20 per cent.) and chloride of zinc.—British Medical Journal.

Intermittent "Limping."

S. Goldfiam (Neurol. Centralbl., March 1st,) points out that the symptoms of intermittent "limping" (intermittirende Hinken) are very characteristic, and considers that when a man complains that during the exercise of walking pains or paraesthesia appear in the legs (especially in the calves) and that these pains disappear on resting, only to reappear after the walking has been again indulged in, the duty of the practitioner is to examine the arteries of the feet, to determine whether there is pulsation or not. The absence of pulsation in the dossalis pedis artery (inter alia) is conclusive evidence that the disease is "intermittent limping," and not rheumatism, sciatic, or neuralgia. He cites cases to exemplify the nature of the paraesthesia. The local conditions depend on a definite arteritis, and he considers that the vasomotor disturbances are partly consecutive. He has not been able to detect atheroma in any cases, and points out further, that the age of the patients is generally inconsistent with the view that it could depend on a pre-existing atheroma. The sufferers from intermittent limping are generrlly between 30 and 40 years of age. He mentions that this disease has been stated to be associated with diabetes, but he cannot accept this, as only in one patient out of thirty did he find glycosuria. Nicotine poisoning also does not, in his mind, give a satisfactory causal explanation of the condition. He points out that there is a considerable likeness to Raynard's disease, and further, makes some general statements with regard to a marked herditary neurotic diathesis in most of his patients. He next points out that in his experience, gangrene occurs in 28 per cent., and that the disease, even when it does not lead to mortification, is a serious progressive one. It sometimes remains stationary for many years, and among the cases he relates is one in which the condition remained unaltered in one foot only. With regard to treatment, he does not lay down any hard-and-fast rules. Reasonable local and general means to allay symptoms—pain, etc.—good diet, an attempt to establish a collateral circulation, and rest are the indications he follows.—British Medical Journal.

Chemical Caustics in Epithelial Cancer.

At a meeting of the College of Physicans of Philadelphia on June 5th (Philadelphia Medical Journal, June 15th), J. F. Schamberg exhibited two patients showing epithelial cancer of the cheek treated by chemical caustics. The first patient was a woman of 83, who had only a short linear scar marking the site of an epithelioma of fifteen years' standing. The treatment consisted in the application of 25 per cent. carbolic acid ointment for a week, and then a 50 per cent. solution of caustic potash, followed by 25 per cent. arsenious acid. These applications were made after swabbing the parts with cocaine. In four weeks the growth was completely healed. The second patient was a man who is at present undergoing the same treatment.—British Medical Journal.

Heppocrates' tombs was discovered in the course of recent excavations at Larissa, in Thessaly.

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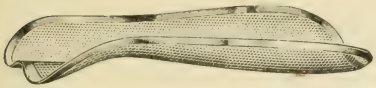

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A Fat Bill.

Dr. Walter C. Browning, of Philadelphia, it is said, has rendered a bill against the estate of Senator "Chris" Magee of $190,000, for professional services. The bill covers twenty-one months, and the charge is at the rate of $80 per hour for visits and actual attendance. One item is $17,000, for last summer's treatment at Atlantic City.—*Times.*

Professor Osler in his work on the "Practice of Medicine," says, "It is paradoxical but true that few of our patients die of the diseases from which they suffer," etc. Professor Osler, of course, refers especially to the causes of death in chronic diseases, recognizing that in the last event it is not the sudden failure of hepatic, or renal or cardiac capacity that ushers in the terminal event.

Removal.

Dr. J. B. Matthews, who has practiced medicine for the past six (6) years at Pittsboro, N. C., has moved to Greensboro, where he will practice his profession.

Ergoapiol (Smith)—As an Emmenagogue and Oxytocic.*

Ergoapiol (Smith) being introduced, as I understand and have reason to believe, to the physicians only, and under all the rules of Professional Ethics and furthermore as it has proven exceptionally efficacious in its indications, it seems reasonable that I should report the results of my investigation with the same.

As the stoppage, scantiness, or non-appearance of the menstrual flux arises from very different causes, and as these causes are of diverse or even opposite natures, and may often be removed by drugs, it is obvious that very many remedies of very different character are indirect emmenagogues. Thus, amenorrhea may depend upon plethora, or it may be the result of anæmia; and while in the one case, depletory medicines are indicated, in the other case, tonics are no less essential. As a direct emmenagogue, Ergoapiol is the drug par excellence. In such cases where uterine stimulation is required Ergoapiol should be given.

Another thing of vital importance in favor of Ergoapiol (Smith) is its non-toxicity and entire absence of narcotic action. Unlike ergot where one has to be continuously on the lookout for ergotism, or other results following the use of numerous other emmenagogues, whose action has proved fatal in so many instances, Ergoapiol (Smith) can be given without fear.

As an oxytocic, Ergoapiol is second to none. Its action is far superior to that of the best fluid extract of ergot on the market to-day. It has for the past year become routine pratice with me to administer Ergoapiol after each confinement.

Ergoapiol (Smith) has given me better results than any drug I have ever used. I prescribe it in all my cases of dysmenorrhea. Success upon success has gratified my efforts since I began using it. Its therapeutic merits as an emmenagogue is simply phenomenal.

In concluding, all I would say is, that the physician should here lay aside his skepticism and give this remedy a thorough trial. Doubtless, most physicians feel, as I did when I first learned of Ergoapiol, that it is about as good as the apiol sold in the market, which is indeed inert and ineffective.

With great pleasure, I cite a few of the many cases treated with this remedy:

Mrs. W., Madison Street, New York City, age thirty-nine, widow, has had severe backaches shortly before and during her whole menstrual period, which usually lasted from three to four days. I dialated her cervix between her period some two months back, but it did no good. I administered Ergoapiol (Smith), one capsule t. i. d., and to my surprise, she has gone through her last monthly period without pain or discomfort.

Miss X., James Street, New York City, age nineteen, single, contracted syphilis six months ago and ever since that time, although under treatment for the above-named disease, has had severe pains with scanty flow during her menstrual epochs. Her physician tried, so she tells me, "most everything he knew of" without avail. She came to me about two weeks before her last periods were due and I gave her two prescriptions, one for a douce to "begin at once" and the other, two caps Ergoapiol, t. i. d. one day before her expected period and to be continued for the following three days. I am glad to state that she has passed through her time with a full flow and absolutely painless.

Mrs. F. M., Sixty-second Street, New York City, has suffered intense pain pefore and during her menstrual periods. I administered Ergoapiol (Smith) about four days before the expected time, one capsule three times daily. She went through her period without the slightest pain or ache.

Miss McG., single, age nineteen, began menstruating at fourteen, irregular and extremely painful. Administered Ergoapoil as per above mentioned case with the following result: Noticed a great improvement. Pain was very much lessened and did not compel patient to seek her bed. Repeated the Ergoapiol during her last term with the happy result of an absolute cure.

Mrs. M. M., Cherry Street, New York City, married, suffered great pain during the first and second day of her "term" Gave Ergoapiol, one capsule every four hours as soon as the term began, and had the usual pleasing results of a perfect cure.

*By M. A. Auerbach, Ph. G., M. D., New York City.

The latest serum to be proposed is one to confer immunity against spermatozoa. Metschnikoff, of the Pasteur Institute, Paris, has been making a series of experiments that show that sheep spermatozoa, injected into the peritoneal cavity of the guinea-pig, lose their mobility much more rapidly if the animal has previously received an immunizing spermatozoic dose. The inference is that complete immunity through appropriate dosage is one of the possibilities.

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The Physical Effects of Emotion.

A very interesting experience is related in the Times by a gentleman who was present during a performance at the Grand Theatre at Islington, at which an alarm of fire was raised. With the wife and two children he was in a box when a flash of fire ran along the flies, and the fire-proof curtain was lowered. He immediately realized the possible consequence, not only of fire but of panic, and he was conscious of feeling terrible anxiety. But he was surprised to feel also, at intervals of a second or two, a sharp and sudden pain in the small of the back three times repeated, as if he had been grasped and squeezed tightly in a gigantic hand, and when he wrote fifteen hours later, the seat of these pains was still sore. The bodily accompaniments, or as some psychologists will have it, components, of emotion are as various as their *rationale* is puzzling. No doubt the usual bodily signs of fear are the same now as, says the correspondent of the Times, they were in the days of Homer; he might have gone farther back. They are the same as those described by the Temanite, when fear came upon him and trembling, which made all his bones to shake, and the hair of his flesh stood up. But the signs of fear vary much in different individuals. In pregnant women, a sign of fear is contraction of the uterus, which sometimes leads to abortion. In a case with which we are acquainted, a sign of anger is a painful spasm of the back of the neck. Even annoyance, which is commonly expressed by some interjectional stock utterance, may exhibit itself, *teste* Shylock, by incontinence of urine. In Private Mulvany the rage of battle was signalized by vomiting; but in this case there is an element of doubt. Mulvany was not in a Highland regiment, but there may have been bagpipes in the bridge.—*Indian Lancet.*

Insects as Factors in Conveying Diseases.

Surgeon-General Wyman, at Washington, D. C., has issued a general circular to medical officers of the Marine-Hospital Service calling special attention to the importance of insects as factors in conveying diseases. The circular says that there is no longer doubt as to the relation of the mosquito to malarial diseases and to filariasis. "According to Simond," it says, "plague is transmitted from the rat to man by the flea. The infection of typhoid fever and, to a certain extent, cholera may be conveyed by flies. Medical officers are directed to place mosquito nettings over the beds of communicable diseased patients." Hospitals are to be thoroughly protected by fly screens at all openings, particular attention being paid to the kitchen, dining room, and protection of the food. Sulphur fumigation is recommended as the best method of killing insects in a large room.—N. Y. Medical Journal.

Funis Strangulating Fœtus in Utero.

Strassmann (Centralbl. f. Gynak., No. 25) reports a case of some interest where a woman, who had borne four living children, had occasional slight hæmorrhages in the course of her fifth pregnancy between the fifth and eighth month. There was no evidence of placenta previa. Fœtal movements ceased a fortnight before labor pains began in the ninth month. The uterus grew perceptibly smaller during the last fortnight. The presentation was transverse, a macerated fœtus was delivered by spontaneous evolution. The funis had become twisted five turns round the neck, which was deeply constricted and much elongated, Only a short segment of the cord was attached to the placenta, which was free from disease. The bleeding during pregnancy was due either to tearing of the placenta by traction of the shortened cord or to engorgement and congestion caused by the obstruction in the circulation of the umbilical vessels.—British Medical Journal.

Flies and the Science of Scavenging.

G. V. Poore (Lancet, May 18, 1901), advises that every means should be taken to dispose of human and horse excreta, as it is in these materials that the female fly lays her eggs. The best method is to bury the excreta in long shallow furrows, rather than in deep trenches, which take too long a time to dig and thus necessarily increase the cost of the work. The author is convinced that enteric fever is caused by the carrying of the germs from the excreta to the human subjects by flies. Cow dung should be stacked in piles and then covered with earth, so that the female fly cannot deposit her eggs in it. As each fly lays about 120 eggs at a time it is reasonable to suppose that in a hot summer she will breed in all, over 25,000,000 descendants.—*Medicrl News.*

Norway has a law dealing with cremation. According to the act, every person over fifteen years of age can be cremated after death, if he or she has made a declaration in the presence of two witnesses. For those under fifteen a declaration on the part of the parants is necessary.

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Diaphragmatic Hernia.

C. A. Parker reviews five cases and arrives at the following conclusions:

1. Diaphragmatic hernia is of fairly frequent occurrence; the diagnosis is more rarely made than in almost any other known surgical condition.

2. Absence of a sac is the rule, it being present in rut ten per cent. of all cases, and in only about one per cent. traumatic.

3. Although the so-called weak places in the diaphragm predisposes to hernia in some traumatic cases, in shot and stab wounds no such causal relation exists.

4. Stab wounds are usually on the left side because of the desire of an adversary to inflict injury on the heart side, and because it is the side naturally opposed to a stroke from an opponent's right hand.

5. The contents of the hernia are most frequently omental, but may include almost every solid and hollow viscus in the abdomen.

6. A complicating intercostal hernia is not infrequent, having occurred in two of the writer's five cases.

7. Though many of the congenital and acquired lesions of the diaphragm are so extensive as to be incompatible with life, yet gross defects in its structure, with dislocation of many important viscera, may occur with little or no disturbance of health.

8. The diagnosis is aided by the presence of local scars, or lesions directing attention to the diaphragm. Skiagraphy may also be of value.

9. The immediate danger in large wounds of the diaphragm is due to injury of the adjacent viscera; the remote danger, from contraction of the opening and constriction of the contents, is greatest in small wounds.

10. Spontaneous cure may result from contraction of the orifice and atrophy of the contents composed of unimportant structures.

11. The treatment is surgical on account of (a) the infrequency of diagnosis, (b) severity of gross lesions and symptoms, and (c) inaccessibility of the part injured.

12. In the examination of all wounds in range of the diaphragm, the possibility of injury to that muscle should be remembered, and all wounds in its structure should be closed at once, if possible, to prevent the development of hernia.—*St. Louis Medical Review.*

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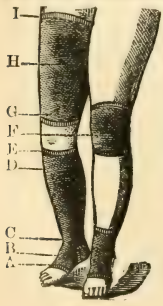

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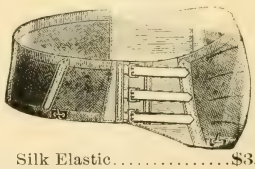

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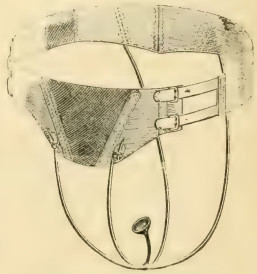

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Clinical Experience With Adrenalin. *

The aqueous extract of suprarenal gland is perhaps the best culture medium known. Its inability, the involved method of preparation, its unsightliness, and the inexactitude of its various strengths, tend to make us welcome a preparation that is exact, stable and above all, clean. Dr. Jokichi Takamine undertook the task of isolating the active principle of the suprarenal gland. He obtained a substance in stable and pure crystalline form, which raises the blood dressure, and which he named "Adrenalin."

The author has used solutions of Adrenalin Chloride, 1 to 1,000, 1 to 5,000 and 1 to 10,000. His cases were all rhinological. Blanching of tissues followed the application of the strongest of these solutions in a few seconds, and was very thorough. In no instance was there any constitutional disturbance. He has employed no suprarenal extract since, for any purpose whatever.

The effect of the solutions was not altered by their change to a pink color; they were used for six weeks. Subsequently a small amount of chloretone was added to the fresh solutions and now there is but slight change of color and no floccules appear.

Thirty-five cases are reported in tabulated form, showing that the usual effect of the aqueous extract of the suprarenal gland was obtained. A few operative cases bled freely, but in every instance the hemorrhage was promptly checked by a second application of Adrenalin. The Adrenalin was used not only as a hemostatic, but for the relief of nasal congestion, as a diagnostic aid, and for the continuous treatment of acute inflammatory affections of the accessory sinuses.

The author arrives at the following conclusions:

1. Adrenalin solutions supply every incation for which the aqueous extract has been used.

2. They are sterile.

3. They keep indefinitely.

4. Solutions, 1 : 1,000 are strong enough for operative work; and 1 : 5,000 and 1 : 10,000 for local medication.

5. They may be used with safety.

In this connection it is interesting to note that E. Fletcher Ingalls, M. D., of Chicago, also has had a very satisfactory experience with Adrenalin. In a paper entitled "Notes on Adrenalin and Adrenalin Chloride†", he reports that he experimented with solutions, varying from 1 to 1,000 to 1 to 10,000, of the Chloride of Adrenalin in distilled water or normal salt solution, and kept careful records until satisfied of its activity. In nine cases a very small quantity of a spray, of one part of Chloride of Adrenalin to 1,000 parts of water, was applied to the nasal cavities, with the effect of blanching the mucous membrane quickly, and in most cases causing contraction of the swollen tissues similar to that caused by cocaine. The first solution used was made with distilled water and caused smarting; normal salt solution was then used as the solvent with perfect satisfaction. The smarting may have been due to the presence of a small quantity of rormalin in which the atomizer had been washed just before use.

Experiments were also made with insufflations of a dry powder consisting of 1.5% (75 parts) each of biborate of sodium and bicarbonate of sodium; 3% (150 parts) light carbonate of magnesium; one part of Adrenalin to 5,000 parts sugar of milk. This powder cleared the nasal cavities when obstructed by swelling of the turbinated bodies, and diminished the secretions decidedly. A case of daily epistaxis was relieved by sprays of a 1 to 10,000 solution. Another of conjunctival congestion from overwork was entirely relieved by the instillation of a similar solution. The author has had equally satisfactory results in cases of conjunctivitis; laryngitis, acute and chronic; acute laryngitis with edema glottidis; acute coryza; chronic laryngo-tracheitis with acute exacerbation; and in preparations for operations upon the nose.

In conclusion, the follywing results are presented: This remedy will be of great value in the treatment of acute inflammatory affections of the nasal cavities, either in sprays of 1 to 5,000 or in powders of 1 to 5,000 or 1 to 2,500 sugar of milk. In acute coryza and in hay fever, in epistaxis from various causes, in acute inflammation of the fauces, solutions of 1 to 1,000 will have good effects. In acute or subacute laryngitis, solutions of 1 to 1,000, applied with moderate force, will give very great relief. It appears probable that vocalists may obtain sufficient relief from congested cords, for at least two or three hours, to obtain normal efficiency in the use of the voice.

In a paper read before the Chicago Laryngological and Climatological Association, W. E. Casselberry, M. D., called

* Emil Mayer, M. D., Surgeon, New York Eye and Ear Infirmary, Throat Department; Fellow American Laryngological Association, and the New York Academy of Medicine, New York. Abstract from ariginal paper, in the Philadelphia Medical Journal, April 27, 1901.

† Journal of the American Medical Association, April 27, 1901.

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The author expresses the opinion that Adrenalin should afford relief in asthma associated with bronchitis and vaso-motor paralysis, although he would expect little benefit from its use in asthma characterized by bronchial spasm. It may be formed into an ointment with vaseline, or mixed with stearate of zinc, powdered starch, or sugar of milk to make powders for nasal or laryngeal insufflation. The bibliography is very comprehensive, covering the literature of the subject down to the present date.

The 1876 Class of the Department of Medicine of the University of Pennsylvania held its First Annual Banquet at the University Club, in Philadelphia, at seven P. M. on Alumni Day the eleventh of June, and effected a permanent organization for the benefit of its Alma Mater.

The following officers were elected:

President, Charles A. Oliver, A. M., M. D., Vice President, William H. Klapp, A. M., M. D., Secretary, Francis M. Perkins, A. M., M. D., Treasurer, Benjaman F. Baer, M. D., with an executive committee of twelve members who will meet at the call of the President.

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Conservatism.

Socrates had a habit which made him great and detested, that of asking questions which nobody could answer, and surely the physician of the present era is placed in an awkward position by the rapid and frequent changes of view he must take when following modern teachings from day to day, and, like Socrates, he has many questions to ask that no one can answer, which would, no doubt, make him detested and not at all add to his greatness.

"Changing minds all noble natures bear," old Homer has said, and though no profession can show a more noble array of minds than ours, the every day, hard working, steady plodder, will find it difficult to catch from the fleeting hours the needed time to keep himself *au fait* with the latest wrinkles of medical speculation. When at the *alma mater* he was taught to treat inflammation in the right iliac fossa by opium, perhaps combined with small doses of calomel. or comp. extract of colocynth, and great pain there was best relieved by large hot poultices; only light liquid diet should be allowed, and perfect quiet insisted on. He returned to his home and for many years he treated his cases, of what he usually called "*typhilitis*," in this way, and they all recovered. Later he reads in his Medical Journal one day that he has been all wrong, for the light thrown on these cases by modern pathology discloses the fact that the offending member is the vermiform appendix. which hitherto has been to him but the rudiment of an organ. He is told when the aforementioned symptoms arise, he must use vigorously calomel or salts, and apply ice bags to the region, if, after twenty-four hours of this treatment, the symptoms have not ameliorated, an operation is imperative. So he reproaches himself for his previous treatment of these cases and shudders at the terrible chances he has allowed his trusting patient to pass through. Then a case comes his way, he uses the calomel, the salts, and the ice-bag; in twenty-four hours his patient is immeasurably worse. He telegraphs to the nearest large medical center for an expert, who arrives, operates, and—the undertaker does the rest.

Will not somebody look the matter up and ascertain if the mortality of the disease has been lessened by *promiscuous* laparotomy? It is said that no honest laparotomist claims less than two per cent. mortality, and could not the "*only-medical-treatment*" man show as good results?

We are all of us actuated primarily with the desire to do good to our patient, but we may be led away from the lessons we have learned "not and found wanting," to practices inculcated by those in high places, who are not aware of the terrible results which may follow a general adherence to teachings having origin in the vagaries of their inner consciences. Let us be sure then, before we relinquish our established and successful methods of treatment for something new and untried, that we are giving our trusting patient the benefit of all *our own* observations and deductions from previous experience, and not to be too easily led to replace it with something we have no knowledge of but hear-say.

Hippocrates tells us when called to treat a patient "to do good, if we can, but be sure we do him no harm." As it was said of the healer of the soul, let it be said, in all reverence, of each of us of the medical profession, *pertransivit benefaciendo.*

J. W. Atlee.

Appendicitis and Salpingitis.

Kauffmann describes a case where a woman, aged 28, had been subject to repeated attacks of perityphlitis. In February a severe attack with much exudation occured; it subsided, and the exudation was absorbed. Then Kauffmann operated, and removed the appendix and the tube and ovary. The Fallopian tube was adherent to the cæcum and appendix, and the weight of the uterus had dragged upon is so as to cause great elongation, reducing it to a tight band passing over the brim of the pelvis. This stretched tube measured over 7¼ inches in length; its ostium was open. The appendix adheared to the free border of the broad ligament, just under the fimbriated extremity of the tube. The morbid condition above described was clearly due to the recent attack of perityphlitis. The tube had adhered to the exudation; when the latter was absorbed great contraction of inflammatory tissue occured, and the adherent tube, therefore, was dragged upon and became stretched.—*British Medical Journal.*

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Chess.

The mental breakdown of three of the world's greatest chessplayers auggests queries as to the value of chess as a game, and especially as to the evil of exhibitions and match gsmes. There is something highly abnormal in the powers demanded in championship games. Clearly the game of chess is not worth the candle of sanity and life. The military, medieval, and royal types of life upon which the imitation battle is founded, are, moreover, no longer desired in modern civilization. Evolution has gone beyond all that, and the commercial, scientific, and democratic ideas of civilization are so different that the mental exercises that mimic and stimulate the old and outworn phases of human activity are precisely those that do not conduce to progress and succes. Peasants are no longer pawns, castles are in ruins, and if a king is checkmated, why, there are thousands of better men fitted to rule under the title of President, Governor, etc. Physiologic or biologic problem-solving is not helped by the peculiar mnemonics and ingenuities of the chess-nut slover.—*American Medicine.*

Sanmetto in Enlarged or Atrophied Prostate, with Urinary Difficulties.

In cases in which I have had occasion to use Sanmetto are quite numerous and varied, both acute and chronic, and when indicated have produced very satisfactory results, both to me as well as to the patient. For a period of three years Sanmetto has been my sheet-anchor in the large majority of cases of prostatic and urinary difficulties, both in enlarged prostate as well as atrophied conditions. I may sum up the whole category of prostatic and urinary ailments, and say in my experience that Sanmetto covers more general indications and is more reliable in any hands than any other remedy. I use and have great confidence in Sanmetto.

J. S. Fisher, M. D.,
1876 Pulte Med. Col., Member National Homeopathic Medical Association, Member Ohio State Medical Society and N. W. Ohio, Medical Society, and Toledo Medical Society.
Toledo, O.

Treatment of Lupus With Ethyl Chloride.

Dethlefoen reports a case of lupus of the face treated with ethyl chloride. The teartment consisted in freezing the affected parts without previous scraping. During the first week the freezing was done daily, later every second or third day. After each freezing there occured serious effusion which dried up into a scab. The scab was removed before the next freezing. After ten weeks the ulceration was healed, the lupus nodules had disappeared, and the whole was covered with smooth skin of almost normal appearance. The patient was a woman, and the disease affected the nose and cheek extensively. The photographs show a remarkable result.—*British Medical Journal.*

Flies as Disseminators of Disease

A number of investigators recently have called attention to the important role played by insects in disseminating disease. Because of their great numbers and active habits, flies are no doubt the most dangerous insects in this respect. After feeding on the expectoration of the tuberculous, on the feces of typhoid patients or other infective material, they carry disease germs into innumerable places and deposit them not only by direct contact with their filthy little bodies, but by their excreta and the dust formed by the crumbling of their dead bodies. Restaurants infested with flies are special abominations. The danger from this source is not small and as the summer will now soon be on us in good earnest with hordes of these pests, it seems desirable that everything possible shall be done to limit the amount of mischief done by them. More effective measures are needed for destroying flies and preventing their multiplication. The war on mosquitos by our sanitary department in Cuba has shown what can be done in exterminating insects, and the preparations which are already being made in several diffirent places in our country to carry out the Cuban methods show that the people are willing to act if they are shown the best ways. Until some successful method has been devised for exterminating flies special care should be taken to prevent their access to sputum, pus, or other infectious material; fruits and foodstuffs should be thoroughly cooked or washed if flies have been allowed to come in contact with them, and should be protected from flies after preparation for use. — *American Midecine.*

Burgraeve says typhoid is a disgrace to civilization and should be eradicated by sanitation.

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Responsibility of a Physician to His Patients.

So rarely is a physician held resposible in damages for either unskilful or unsuccessful treatment of a patient that a recent decision of the New York Appellate Division of the New York Supreme Court, awarding the patient damages against the physician, is in the nature of novel law. In this case a woman, having broken her left arm, was attended the following day by the physician, who put the arm in splints and instructed her to carry it in a sling. After attending her for about six weeks the physician found that the bones had not united. After further treatment he put a bandage on the arm, and then, as she testified, told her he was going away for ten days or two weeks on his vacation. He was away for five weeks, and when he then examined the arm he found that the bones had slipped from their positions, overlapped, and formed a union, and thereby caused a deformity, which would apparently be permanent unless the arm should be refractured and the bones allowed to unite in proper position. The physician's side of the story was that he told the woman he would be away for two or three weeks, and if she wanted him to call again she must send for him. The point at issue in fixing the liability of the physician was, which was the correct account of his going away. That issue was left to the jury, which brought in a verdict of $2.000 for the woman. This verdict was considered excessive by the trial judge, and the woman consented to have it reduced to $500. In affirming this judgment the Appellate Court said as to the liability of a physician: "A physician who undertakes the treatment of a patient is bound to exercise not only the skill required, but also care and attention in attending his patient until he notifies the patient that his professional relations are terminated. A physician and surgeon engages to bring to the treatment of his patient care, skill, and knowledge; and while, when exercising these, he is not responsible for mere errors in judgment, he is chargeable with knowledge of the probable consequences of an injury, or of neglect in its treatment, or unskilful treatment."—*Medicel News.*

J. L. Pierson, a faith curist of Valhalla, N. Y., was fined $500 for neglecting to call a physician for his two-year-old daughter, who had pneumonia.

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Plague in Hong Kong.

The present epidemic of plague in Hong Kong, the seventh consecutive epidemic in the colony, threatens to be severe. During the week ending May 11, 128 cases of plague occurred with 117 deaths; and during the week ending May 18th, 122 with 113 deaths. Since the recrudescence commenced, 764 Chinese have died of plague, 12 other Asiatics, and of the 10 Europeans attacked, 4 died. The latest report states that in the week ending May 25th 200 cases occurred, and 187 deaths. The disease is reported to be spread generally over the colony, and that it is difficult for the sanitary staff to deal with the epidemic. The military are assisting the civil authorities in coping with the sanitary necessities. The significance of the plague being again prevalent in Hong Kong is the fact that Southern China as a whole must be considered infected, for Hong Kong is but a dial of indication of what is happening in the adjacent provinces of China. The danger of the outbreak at the present time in Hong Kong is especially great, considering the increased traffic of the port, owing to military operations in North China and in the Philippines.—*British Medical Journal.*

The French governor-director of railroads has written to the different societies opposing the use of alcohol that all the government roads have agreed to the following: First, to discharge all employees who persist in using spirits and wine while on duty; second, all persons who continue to drink shall be dropped from the pension rolls of the company and will not participate in the endowment funds in case of an accident. All restaurants on the roads are forbidden to sell spirits to the workmen.

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A Case of Osteo-Arthritis of the Spine.*

By Michæl Hoke, M.D., Orthopedic Surgeon to the Presbyterian Hospital, Atlanta, Ga.

I have recently had several cases of Osteo-Arthritis of the vertebral column under observation. This one of which I shall give a history has presented all the possible symptoms of the disease, from pain to paralysis, and all of the phases of the process, from the acute onset of the trouble, 4½ years ago, to the present time, convelescence being now quite well established. For this reason, and because during the period of his distress the condition has been mistaken by different observers for all of the diseases with which the Osteo-Arthritic process in the spine is usually confused, and convinced that the characteristic bone changes confined to the vertebræ and spinal ligaments alone is quite common, as frequently to be seen in adult's spines, as caries in children, though not so frequently recognized, it seemed to me that perhaps it might not be amiss to present the details of this one case, its suggestions as to the treatment of the disease, the results at the present time along with some general remarks upon the clinical characteristics of the disease.

*The disease is not new. Its characteristic changes have been found in skeletons in Egypt, dating back before the Christian Era. Petrie found changes in bones, the circumstances suggesting 1300 B. C. as the probable date, others were found in Egypt, the probable referable period, being the second Century before Christ. In Pompeii, by Chiaje, in the Roman Sarcophagus at Smithfield, Eng., by Dr. Norman Moore; in the Catacombs of Paris, by Lebert.

Nor is the disease rare, though from the scantiness of the literature, only 45 cases having been reported, 19 of the disease of the spine alone, and 25 in which the other joints were involved, one would think it infrequent. This paucity of cases reported depends upon the seeming tendency to hold syphilis, chronic rheumatism and rheumatic gout, responsible for the patients' distress if there be no apparent vertebral disease; I have seen cases in women with sensory disturbances in the back, pain, numbness and tingling which were thought to be neurasthenia. In Dr. Goldthevoit's clinic, in Boston, the disease is frequently seen.

Until 1890 when H. Lane and Griffiths first suggested that the same process in the knees and hips, its essential characteristics there and elsewhere being a proliferation of bone around the edges of the epiphyseal cartilages and in the ligaments around the joint, was distinct from the process in rheumatoid disease, its history was linked with the effort of observers in England, Germany and France, to distinctly separate the manifestations of gout, rheumatism and rheumatoid arthritis. Sydenham first in 1763, from a clinical point of view described rheumatoid arthritis as a modification of rheumatism. Rheumatoid arthritis was referred to in the writings of others between that time and 1800. In 1800 Landre Beauvais in his thesis on "Goutte Asthanique Primitiff" described the now recognized features of rheumatoid arthritis; he differentiated between rheumatoid arthritis and gout but believed the rheumatoid process to be a part of rheumatism. He referred to the destruction of the joint cartilages, the chronicity of the disease and deformity of the joints. In 1804 Heberden supported Beauvais but went further and differentiated between rheumatoid arthritis and rheumatism, but he like other observers for 90 years following his day, thought the cases with bony proliferation belonged to the true rheumatoid disease characterized by atrophy of the bone structures with swelling of the surrounding soft tissues. Heberdon's nodes seen on the terminal phalanges of the fingers are typical of the Osteo-Arthritic Change.

The writings of others notably Charcot Trastour, Cornil, Ranvier, Colles, Senator, Virchow, Hutchinson, Spender, and Raymond, crystalized the interest in the rheumatoid joints so that in 1897 the Berlin Congress for International Medicines decided that rheumatoid arthritis should be considered a disease perse.

Throughout all of this discussion, extending over one hundred years, the cases of Osteo-Arthritis were included in the rheumatoid class. No mention is made of this but one sees it from a description of the

*Read before the Southern Surgical and Gynecological Association.

*Bounanty on "Rheumatoid Arithritis."

cases. Not until 1883 was a single case of Osteo-Arthritis limited to the vertebral column and its ligaments described; in that year Bradford reported three cases in young male adults, between 30 and 36 years of age; he called it rheumatism of the spine. Marie reported one case in a man 60 years old who had had trouble with his back for ten years; the spine was anchylosed; five cases reported by Bithrew in all of which there were symptoms of pressure upon the spinal nerve roots. Goldthwait in 1897 reported ten cases; established the identity of the process in the spine with the proliferative arthritis of which the node observed by Herbeden on the fingers and later by others in the head of the tibia and femur is the typical result and clearly separated this type of bone lesion from the atropy of the epiphysial cartilage and destruction of the heads of the bone characteristic of rheumatoid disease.

It is then a distinct entity, has its own definite pathological change, its own clinical characteristics and must have, though it has not been determined, its own definite etiology.

The following is the history of the case: Dr. S. H., male, age 30. One evening in March, 1896, he got wet, the next morning he woke with severe pains in the lumbar region and in the thighs; he could hardly turn over. The usual measures for relief of pain were applied; these gave some relief. The next day he was able to leave his bed and room, but not without effort; the back was stiff and painful. This back-ache continued for several months, not excruciating, but sufficiently severe to keep him from going about much; during that time he was given tonics, massage and the Paquelin Cautery—there was no relief. In the winter '96 to '97 he was in Baltimore as a student; his general health was poor; the back-ache constantly. In the summer of '97, the neck began to stiffen without appreciable cause; he spent the summer of '97 in South Carolina practicing medicine. After having worked for a few months with increased pain he returned to Baltimore for consultation and was advised to go to Hot Springs; there was no bony deformity detected at this time; he remained at Hot Springs taking the baths and massage, but was little benefitted; his condition was unchanged until the early summer of '98, when he began to suffer violent pains in the left side of the neck, extending on the left half of the scalp and down the arm; then numbness came on over the posterior half of the left side of the scalp, associated with weakening of the left arm, numbness and pain in the fingers, with partial atrophy of the hypothenar group of muscles of the left hand. The pains in the neck and head were excruciating, aggravated by the least motion. He went to Baltimore again and a diagnosis was made, neurasthenia, he was massaged, given electricity, tonics, laxatives, bowel irrigation. In August '99 he went to New York; different views of the case were taken there; by this time there was distortion of the cervical vertebræ; this was palpable; a diagnosis of tuberculosis was made by one observer; the disease was thought to be located in the third cervical vertebræ; this vertebræ was distinctly enlarged when I saw him first and must have led to the idea of caries; a corset with jury-mast was advised; other observers there regarded the condition as rheumatoid arthritis; the plaster-jacket and jury-mast was applied; the patient went home but returned six weeks later to put on aluminum corset and jury-mast; there was less inclination to say there was cervical caries, but the corset was put on. From this doubt the patient was not faithful in wearing the apparatus; it would have benefitted him if he had done so. For two years preceeding March '00 no weight had been gained or lost; the appetite was good, the pain was greatest when the bowels were irregular. The patella reflex was increased slightly on the right side; the hypothenar muscles regained their normal size. During the above period he had liberal dosage with all anti-rheumatic remedies, iodides and mercury had been freely administered, too, from the idea that he had syphilis of the spine. From March, 1900 to August, 1900, the pains above described got worse; he could not sleep, became abdicted to the chloral habit, twice taking almost a fatal dose.

He came under my observation Aug. 1900; he was anæmic, hamerglobin sixty per cent. The pain was as above, not constant, coming on in severe waves. Ordinarily his sleep was disturbed seven or eight times at night by sharp pains in the neck, at times he could not sleep at all; he was weak, nervous; hands, feet and skin cold and clammy. There was a little fermentative dyspepsia; the spine was straight and almost completely anchylosed from the seventh cervical to the sacrum. Some lateral mobility was still possible; the sum total of motion between all the vertebræ giving at the seventh cervical motion through a few degrees. The thorax was rigid; the head was rotated to the right and inclined forward, the neck could not be straightened; there was great spasm of all the muscles of the neck; much bony thickening throughout all of the cervical region, the spine there

being one-half again as thick there as normal; the hollow below the occiput was obliterated; the third cervical vertebræ, particularly prominent behind, while its left transverse felt as big as the end of your thumb; the neck was not completely anchylosed, but any attempt at motion was attended with a great deal of pain; the left row of transverse processes were displaced forward, the right backward. The pain, numbness, tingling and partial paralysis of the group of muscles mentioned were all due to this bony thickening producing nerve pressure at the foramina for the exit of the cervical nerve. The lungs and heart were normal, the liver area seemed a little small, the right kidney was palpable and too freely movable; the stomach contents showed a trace of peptones, no pro-peptones, no lactic acid, total acidity 25; free H. C. to .07; there was deficient absorption as shown by lavage; the stomach analysis simply show loss of stomach tone; he was put on a forced diet; the food given every three hours day and night for awhile; then only in the day; electricity was given to the stomach wall and lavage twice a week; he was given tincture of Nux Vomica Ferranin, Carbonate of Guiacol; all other medicines were cut off; no chloral bromide or other depressing drugs allowed.

In one position only in the recumbent posture did the muscle spasms in the neck let up; there was comfort in this position; it relieved the nerve pressure; in that position there was no need of the muscles protecting the spine from painful motion; their rigidity being a crying demand for immobilization. For a while the pains were relieved by hot sand bags which permitted the patient in the recumbent posture to nestle the neck into them in the non-spastic position.

In addition to these measures, after three weeks' observation, the spine was immobilized in a plaster of paris jacket with an extension up to the top of the head; the head strapped back to that extension; there was no traction on the neck; this is not indicated; this jacket was applied with the patient on a hammock in the restful non-spastic position.

At present, three months since he first came under observation, but for the peculiar straddle legged gait, as a result of the loss of the lumbar curve with the center of gravity of the body anterior the heads of the femurs and the slight forward inclination of the head, one would not think there was anything the matter with the patient. He has a good color; his hemoglobin is 85 per cent.; only five pounds have been gained in weight, but the patient is active. He passes through the day with practically no pain; he usually goes through the night without discomfort, if he sleeps in the jacket; but about two or three nights in the week, he wakes up about five o'clock in the morning with a dull neckache; several glasses of hot water relieved this, exactly why I don't know; there is now no spasm of the neck muscles; there is more motion of the cervical region on account of the lack of muscle tension, and too, I think, from a slight diminution in size of the bony outgrowth since the acute process has quieted down. Of course, no effort was made or will be made to forcibly interrupt the spine; such an effort would fail and excite the process again.

The disease consist in the deposition of bone in the spinal ligaments, nodular enlargement of the cartilege with subsequent ossification of these nodules. The process usually begins in the anterior ligament of the spine, and extends up and down. Frequently it is only local, a small segment alone being involved, or, as in this case, it may extend from the sacrum to the skull. If, as in this case, the disease is on both sides of the spine, or only on one side, all of the way up, the spine is rigid and straight. One segment may be involved then a segment of several vertebræ skipped between that segment and another segment similarly involved.

Coincident with deposition with bone the cartilaginous intervertebral dics are replaced by bone, so that the bodies of the vertebræ may be fused together in that way; the spine may be anchylosed too by the continuity of the body splints which are substituted for the ligaments.

The spine may be anchylosed in the straight position, the curved position or with a rounded backward arch. Spasm of the back muscle in the early stage of the disease without loss of the vertebral bodies, tends to straighten the lumbar and dorsal curve, hence when there is much pain with resultant spasm a stiff straight back results, the muscle spasm holding it straight while the body change fixes it so. Again a rounded arched back may result.

Rarely are the spinal processes affected; the extension of the disease to the transverse processes is the most unfortunate thing that may happen to the patient, for it means deposition of bones around the foramina and nerve root pressure producing the disturbances of sensation, pain and paralysis. Not all of the pain is due to nerve pressure and muscle spasms, for there seems to be a definite clinical relation between the condition of the digestive tract and the degree of suffering. Just what this is is unknown.

It suggests the intestinal tract as the laboratory for the manufacture of some toxic material productive of the disease. Absolutely nothing definite may be said of the etiology of the condition; it may follow a let down in health from any cause in an adult, young or old. No etiological relation can be found between the process and the poison of gout, syphilis and rheumatism. Goldthwait who has seen more of the disease than any one here and abroad, describes it to the action of abnormal trophic impulses; this, of course, means nothing definite and is meant by him to suggest abnormal metabolism. Certain it is not an infection; no spinal cord has been examined to find a lesion there, nor do I believe any would be found.

In the cases which have recently come under my care I have been greatly impressed with the clinical relation between the digestion and the disease, for the improvement in the condition when the stomach and bowels have been carefully looked after, the digestion and assimilation were carefully studied has been marked. Iodides, bromides, salicylates and other depressing drugs, so long as they are administered, lend the process a helping hand. Any antirheumatic treatment with a curtailment of the food supply does harm, while, on the contrary, as soon as the diet is forced after an intelligent study of the individual food needs, things begin to quiet down; the patient gains strength and suffers less. The proeess is one of bony excitation, one may say for lack of knowledge and descriptive term; any irritation causes an increase in the production of bone. Giving a spine, which has been so affected, the normal motion of that spine acts as a constant injury to the damaged vertebræ. It is thus necessary to absolutely immobilize the spine until the acute process quiets down. There are three things to take into consideration in the treatment of the disease. Firstly, remember that it is not rheumatism, nor nor syphilis, nor gout, and that if the usual treatment for any one of these conditions is followed, it will do the patient incalculable harm; secondly, the spine must be given complete rest by immobilization with plaster of paris jacket or apparatus; thirdly, a thing to be determined in each case, the condition of the stomach and intestines must be thoroughly examined into and any defect of digestion, however trivial, seemingly, must be corrected.

Immobilization of the spine alone will not give a good result, neither will the mosl careful attention to the digestion alone give a good result; the two things must go hand in hand.

At this time the condition of the patient is as follows: He looks healthy; he has no pain in the day; he sleeps well. There is a dull ache in his neck in the early morning, but it soon passes away. There is no muscle spasm in the neck: the process has been checked. The spine will always be stiff. Any attempt to break up the bony deposits around the vertebral joints would do incalculable harm. The jacket can be discarded in a little while. A proportionately better result could have been obtained if the disease had been properly attacked in its incipiency.

Chronic Interstitial Nephritis, with Report of an Atypical Case, and Autopsy.*

By H. N. Rafferty, M.D., Robinson, Ill.

Bill Nye once said that John Bright, "having discovered the need of a good reliable disease for the use of the aristocratic statesmen, began to sit up nights and perfect Bright's Disease."

But it is at once apparent that our ex-literary-friend, Mr. Nye, had no clinical acquaintence with this so-called patrician malady, else he would never have characterized it as "good" and "reliable;" for all of us have realized that it is far from "good," and extremely "unreliable."

For in all the wide range of pathological changes in this wonderful and as yet intangible soul-container, there is probably not one which manifests itself by such a variable clinical history, nor under such confusing circumstances, as that popularly known as "Bright's Disease."

When the morbid changes accompanying this class of diseases were first pointed out by Dr. Bright, it was believed that a granular degeneration was the only lesion found. But our more recent advances in pathology have shown the kidney to be the seat of numerous pathological processes, in the course of which it presents a great variety of appearances. And chief among these, in point of interest, is that characterized by an increase in connective tissue, with a consequent atrophy of the urinary channels.

Chronic diffuse interstitial nephritis is a disease of adult life, being rarely seen in children. As to its etiology, it may follow some chronic debilitating disease, or steal insidiously upon its unwary victim, after a

*Read before "The Crawford Co., Medical Society," March 10th, 1901.

life of alcoholism, vicious or sedentary habits, overeating, or exposure.

Lancereaux says there are three types of interstitial nephritis—viz: (1) elderly persons who possess other symptoms of arterio-sclerosis; (2) younger persons with an inherited predisposition to arterio-sclerosis; and (3) younger persons with lowered or suppressed developement of the nervous system. He believes the disease to be the outcome of a neurosis, which he calls herpetism—with endarteritis as the most constant sequence.

An interesting example of drug-nephritis is mentioned by Jaccoud. The man had been a painter, exposed to the saturnine poison for many years, without apparent inconvenience. But in his forty-seventh year he began to complain of headache, dimness of vision, œdema, and frequent micturition. He died within a month from uræmia, with albuminous urine, and the autopsy justified the primary diagnosis of chronic interstitial nephritis.

This essential proliferation of connective tissue gradually chokes more and more glomeruli, until in time a decided resistance is offered to the blood current; the arterial walls become fibrous, thickened, and less elastic; and the signs and symptoms of circulatory obstruction appear.

This obstruction begins primarily in the glomerulus, and gradually extends to the heart. The vessels being stiff and non-elastic, the arterial pressure is increased, the heart must work harder, and, consequently, we have an hypertrophied left ventricle, and fierce apex-beat against the chest wall. This increased arterial tension extends to the kidney, and occasions a larger amount of urine and, therefore, no œdema, as a rule. The urine is of low specific gravity, the total amount of solids being always diminished. There are usually no albumin, or only a trace, and few casts. Hyaline casts are sometimes present, epithelial casts rarely, and blood casts practically never.

Serous membrane inflammation is common in the interstitial form of chronic nephritis, and often affords a point in diagnosis. The same may be said of epistaxis, and of cerebal hemorrhage.

These individuals with interstitial nephritis may "pursue the even tenor of their way" for years, without inconvenience. In fact, they will last just so long as this compensatory hypertrophy of the heart can maintain the blood pressure, and throw out a large amount of urine. So long as the equilibrium can be maintained they will live; but the degeneration goes on, gradually but surely, passing one mile-post after another, until finally the heart begins to wear out, the urinary flow is less free, and the individual complains of headache, vomiting, vertigo, and dyspnœa—the initial chapters of uraemia.

Hare says there are apt to be evidences of unfavorable functional activity in many of the body organs. For example, early in the establishment of the disease, the mind seems "fogged or muddy"; the soundness of business judgment is apt to be impaired; there are irritability, petulance, and depression often noted. The patient may become a little self-distrustful, suspicious, or somewhat secretive about his affairs or intentions, he is easily annoyed by loud noises; is disinclined to exercise his intellect; apt to dose in the day and be wakeful at night, and in many ways indicate the approach to the borderlines of insanity. The special indications for treatment are to avoid irritation of the kidneys and overwork of the heart.

No specific dietary can be laid down, as this must be adapted to the individual. Over-eating should be avoided, starchy and nitrogenous foods restricted, and fats given generously. All condiments should be interdicted, especially mustard and black pepper. The skin should be kept active, physical and mental fatigue avoided, but moderate exercise and recreation encouraged

For reducing arterial tension, nitro-glycerine, chloral and potassium iodide stand first. Properly applied massage is often useful in dilating the cutaneous arterioles, and thus lowering arterial tension. Also for relief of oedema, when present.

Water is a diluent, and should be given freely. The remedies of art in many of these cases may be hopefully exchanged for those of nature, and in the impotency of such medicine as is represented by our Pharmacopoiea, we may yet be able to take advantage of those universal laws, in virtue of which all life and growth are regulated by the physical conditions of the earth. Keep the nephritic in a low attitude, in the sunshine, and clothed with wool. Many diseases, like plants and animals, are distributed over the earth's surface in obedience to laws which make living subservient to inanimate nature.

If we know the temperature-range, humidity etc., of a given country or locality, we can predict, with some accuracy, the diseases which will be found among its people. Renal disease is more prevalent in a temperate climate, with humid air and earth, sudden temperature changes, and marked difference between day and night temperature. In which ever direction we leave the temperate range, we find nephritis

less common. Hence the prime factor in the treatment should be a climate with least cold, moisture, wind, and variation of temperature.

Tyson has found the highest mortality from nephritis to be in the Middle Atlantic Coast Region, and the South Central States to have the lowest death-rate. Therefore if your cases are suitable for climatic changes, send them to the Carolinas, Texas, Tennessee, or certain sections of Southern California. Hare advises San Diego.

Further considerations of the symptoms, diagnosis and treatment, I will not undertake, as they are oft-told tales to all of you —but the case in point was of peculiar interest, both as to its clinical history, and as to the absence of strongly–confirmatory post mortem evidence.

CASE HISTORY.

J. H. an American, fifty-three years of age, and an iron-worker by occupation, was first seen on June 5th, 1899, when he gave the following history : Was a soldier in our late war, having been in Porto Rico for ten weeks. Had always enjoyed good health, with the exception of the ordinray diseases of childhood, though had lived a fast life and been rather a free drinker of alcoholics. His family history was good. The prominent symptoms were a stubborn diarrhrea, causing inability to work. Physical examination revealed nothing at this time.

The amount of urine voided was so variable from day to day, that the patient spoke of the fact without being questioned.

Chemical and microscopical examination of the urine revealed nothing.

Notwithstanding this negative urinary showing, a provisional diagnosis of interstitial nephritis was made, and he was placed on a mixture of potass. iodide, tr. digitalis and buchu, with dietary instructions. The patient was seen several times during the next two months, and then was not seen until November of the same year, when he again applied for treatment. At this time there were some ascites, and oedema of the feet and ankles.

There had been a gradual and progressive loss of weight. He complained of diarrhoea, cough and dyspnoea when recumbent.

The urinary examination now showed an acid reaction, a specific gravity of 1011, a slight amount of albumin, and a few granular and hyline casts. On December 26th, he was admitted to the ward, the ascites and eodema disappearing under salines and rest. He complained of headache, and had several attacks of syncope—due to arterial contraction.

He had no eye symptoms, but marked deafness, with diarrhoea and bronchitis persisting. A general bronzing of the skin was first noticed at this time, accompanied by a drying and subsequent desquammation of epithlium—the so-called "dermatitis exfoliativa." There was some dilatation of the left ventricle.

Appetite was good and often ravenous. Temperature resmbled that of sepsis, ranging from 96 degs. to 103 degs. F. morning and evening. At this date the urine showed a neutral reaction, a specific weight of 1004, a trace of albumin, and a few small hyaline casts. After January 4th, 1900, there were neither albumin nor casts to be found, the specific gravity ranging from 1001 to 1006.

There followed a gradual and progressive loss of weight and strength with a lessened daily amount of urine, accompanied by uraemic vomiting, stupor and delerium. On March 10th he secreted ten ounces of urine, and there was total suppresion for the following twenty-four hours, at the end of which time death occurred, with stupor and Cheyne-Stokes respiration. The daily amount of urine during the last three months ranged from ten to one hundred and three ounces, with from one to eight watery stools per day.

AUTOPSY.

Stomach and intestines normal in appearance and nearly empty. A few enlarged mesenteric glands.

Appendix without adhesions, four inches long, small and knotty, and contained numerous fecal concretions.

Liver normal in size and appearence.

Spleen atrophied. Pulp soft and friable, giving evidences of granular degeneration.

Right kidney weighed four ounces, three hundred and ninty grains, was firm and hard, but smooth. Capsule was non-adherent. On section, the connective-tissue growth was found to be slight, chiefly in the pyramids, though the cortex was thinned.

Left Kidney weighed four ounces, four hundred and twenty grains, and showed even less change than its fellow. A small hemorrhagic area was visible just beneath the capsule—not noticed on section. The sclerosis was apparently not so far advanced as in the right kidney.

Adrenals could not be found.

Pericardial sac was increased in size, free from adhesions, and contained four drachms clear serum.

Left Ventricle was dilated and empty.

Aortic valves showed a few calcareous deposits—other valves normal. A small clot found in right auricle.

Left Lung showed a continuous pleural adhesion along its inner margin. A well marked mottling of the surface of both lungs, was, on section, shown to be due to a pigment deposit—presenting a very typical pneumoconeosis.

In conclusion, the points of peculiarity in the case were: (1) lack of eye symptoms with marked uræmic deafness, which is exceptional; (2) epithelial exfoliation (a corresponding case having been reported by Duckworth, in the "Lancet") (3) stubborn and persistent diarrhœa, beginning early, before other uraemic somptoms; (4) insatiable appetite; (5) septic-like temperature curve; and lastly (6) the lack of evidence or marked renal sclerosis at the autopsy.

One of the Afflictions of the Aged.

By J. D. Smith, M.D., Paducah, Ky.

Enlargement of the prostate gland is an affliction peculiar to advanced life. The resultant inconvenience is generally governed by the part of the gland most involved, but there is always a partial retention of urine, with more or less decomposition of the retained residuum, and as a consequence a gradually developing cystitis. The pressure of the enlarged gland on the lower bowel also increases the tendency to hemorrhoids and prolapsus ani in the aged patients; and, therefore, a frequent desire to urinate and a sense of uneasiness in the rectum are the two leading sources of distress attending the condition. Of the ulterior and more serious results, especially to the urinary system, we need not now speak, as our object is to suggest a practicable line of treatment for relief while relief may yet be had.

The pressure of an enlarged prostate upon a perfectly sound rectum, or a perfectly sound bladder, produces no pain and gives but little inconvenience. Therefore it is to the prevention or relief of pathological conditions of these organs that much of our attention should be directed. Hemorrhoids or prolapsus of the rectum should have the surgeon's attention at once, and the affected parts should be brought as nearly to the normal condition as possible. But the condition involving partial retention of urine and the gradual development of cystitis must be met, not by the surgeon's knife, cautery or ligature, but by preventive and curative internal treatment.

To prevent the decomposition of and render antiseptic the retained urine, and thereby heal or afford an opportunity for healing the inflamed bladder, Cystogen seems now to be our panacea. And when we thus remove the inflammation of the bladder and rectum we take away all of the active congestion of the gland resulting from these irritations, and leave only the enlargement due to actual hypertrophy. Now will anything reduce, partially or entirely, this hypertrophy; or is the relief obtained from treatment the result exclusively of curing contiguous organs. From close and protracted clinical observation we incline to the belief that even the hypertrophic gland may be more or less reduced by persistant treatment. For this purpose we know of nothing superior to the fruit of the saw palmetto. That this is a genuine tonic to the whole genito-urinary system, in both male and female, we have no doubt. But just how it reduces hypertrophy of the prostate is with us a matter of speculation. Does it make a man sexually younger and thereby remove or modify the condition most favorable to prostatic enlargement? Be that as it may, we have a patient over three score and ten who has been using it for three years and can now evacuate the bladder more perfectly than at any time for ten years past, and has a more vigorous sexual system than at any time for five years past. These facts are given, not to generalize from, but as pointers.

Our ideal treatment for an average case of enlarged prostate is, first, remove any pathological condition in or about the rectum and anus. Give regularly sufficient Cystogen to keep the retained urine thoroughly aseptic. And give persistantly, three times a day, from one to two drachms of the preparation known a Tritipalm, manufactured by Fred. Stearns, of Detroit, Michigan, from the fresh fruit of the Saw Palmetto and Triticum. But should such patients indulge in sexual intercourse? If married, yes. Properly timed sexual intercourse, indulged in with regularity, will give relief to rather than agravate the irritated parts. But unless this can be done with almost exact regularity it better be left off entirely.

Hagee's Cordial of Cod Liver Oil Compound is one of the most popular cod liver oil preparations on the market. All the nutritive properties of the oil are retained, and the disgusting and nauseating elements are eliminated. It offers to the profession a reconstructive of great value. It is easily digested and assimilated, and as a builder it has not an equal.—*International Journal of Surgery.*

Street Cleaning in Glasgow.

This Scotch town with a population of 750,000 has learned not only to keep its 315 miles of street clean, but to realize a large profit from the refuse. The Glasgow cleans ing Department controls several farm- with an aggregate area of 800 acres, employs 1.300 men, and owns 900 railway cars 300 horses and a vast array of carts. It has besides its own railways on its own estates, its own quarries and work-shops. The city refuse is divided into 4 distinct classes, domestic garbage, refuse from business houses, execrement from public works and dwellings, stable manure and refuse abattoirs. These last two articles mixed together form a compound which commands a ready sale and brings a good income to the city. There are special establishments in various parts of the city known as dispatch works for the separation of inferior material from that having value, where ashes and sweepings are screened and scientifically mixed with a fixed quantity of excremental matter for use as a fertilizer and this is eagerly bought up. The iron, tin and paper are sold separately. The useles matter is consumed in furnaces and the civic government of Glasgow is considering a scheme by which the heat resulting from the burning garbage may be utilized as its volume is sufficient to generate 890 horsepower of steam an hour, or power enough to light 600 street lamps of 2,000 candle-power each. The cost of the operations for the year ended May, 1899, was $365,000 and the revenue was $750, 000.—American Medicine.

Our duty to the Soil and Its products.

"The question of our duty to the soil is fundamental in sanitary matters. If we starve the soil and turn our fertilising material into the sea, we may rid ourselves (though this is doubtfub) of filth diseases for a time; but it is by no means doubtful that we shall ultimately replace filth diseases by those diseases that are bred of starvation. How soon this will happen no one can say, but that it will happen eventually seems to me as certain as is the axiom *ex nihilo nihil fit.* Do not let us commit the great blunder when dealing with this national question of forgetting that the life of a nation ought to be measured by centuries. Do not let us make sudicial use of a paltry fifty years' statistics, and because the figures of the last decennium happen to be favorable, conclude therefrom that all our sanitary principles are right. The Chnese principle of returning all organic refuse to the soil is, there can be no doubt, absolutely sound. The Chinese details maybe filthy andsusceptible of improvement. In this country the details of our domestic sanitation are refined, elegant, ingenious. It is the principle subserved by these details which I believe to be absolutely rotten. The main problem of sanitation is to cleanse the dwelling day by day, without fostering starvation. This can only be done by returing all organic refuse to the soil, and the perfecting of the details by which this duty is to be done is the most important work of the modern sanitarian. This question has an immediate personal interest for all who derive their income from the soil. I feel sure the clergy would do well to enforce by example, as well as by precept, the old injunction, to replenish the earth and subdue it. If they do not, they must expec to go without their tithes. Improvement in this direction is only to be attained by rousing the public conscience. So soon as the majority of individuals is impressed with the fact that it is wicked to foul our streams and starve the soil, and that our individual responsibility does not end, even though the fouling and starving be done by a board, so much the better will it be for the public health and national wealth."—*Editorial in Indian Medical Jouanal.*

Why and When we Feel Hungry.

A German physician says we feel hungry when the blood-vessels of the stomach are comaratively empty. Many anæmic patients have no appetite even when the stomach is empty; but the blood-vessels of the stomach are not empty in such cases, but rather congested. In healthy people lack of blood in the stomach acts upon a special nerve and all the characteristic symptoms of hunger follow. Now this hunger nerve and the nerves of the mouth and tongue are branches of the same nerve-trunk. Hence a stimulus applied to the tongue, by a spice for example, creates or increases appetite. On the other hand, when the nerves of the tongue are affected by a diseased condition of the mucous membrane of the mouth, the patient has no appetite, though his stomach may be empty and he may be in actual need of food.—*Sanitary Era.*

A reliable sign in pulmonary tuberculosis is increased whispering resonance long before it may otherwise be determined by the stethoscope or percussion.

THE

Charlotte Medical Journal.

Editorial Department.

E. C. REGISTER, M. D. J. C. MONTGOMERY, M D

Editors and Publishers.

No. 36 South Tryon Street, - - - -

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SUBSCRIPTION. $2-50 PER YEAR,

TRANSACTIONS OF THE NORTH CAROLINA MEDICAL SOCIETY FOR 1901.

A copy of the Transactions of the Durham meeting of the North Carolina Medical Society has been received. It is indeed a handsome volume, carefully edited, well printed, and neatly bound.

To get up this large volume so accurately and so quickly means a great deal of painstaking work for our Secretary. Dr. Pressly deserves great praise for the splendid work that he is doing for the Society.

Never before in its history has the Transactions reached the members within sixty days after the annual meeting.

It is interesting and really it inspires us with a feeling of pride when we glance at our shelves and notice every year the improvements made in our Medical Society Transactions. Less than twenty years ago they were little paper covered pamphlets, issued several months after our annual meetings.

Now we receive a large handsome cloth covered volume, filled with scientific papers and beautiful illustrations and interesting discussions. They come to us new and fresh and in an attractive style.

It is an accumulation of a large amount of scientific medicine and practical surgery, gathered from every part of our State and from men with fixed ideas, matured experience and advanced thought.

Many of the papers it contains have already been published in several of our leading medical journals; some of them have been republished, copied, abstracted, and commented on.

We ought to feel proud of our organization and of its members and the work they are doing. The great number of carefully prepared manuscripts that are presented at each of our meetings is an evidence of an active, progressive society. Many of its members are taking the lead in medical thought; they are coining ideas and methods of their own; they are no longer plodders and followers as they once were; they are educated, scientific men, with broad and liberal views. They compare favorably with the members of any other medical association in any other State, and they will continue to do so as long as our medical Examing Board continues to fill our depleting ranks with competent men. We have to look to this board and hold it responsible for the material to keep up the high medical standard we have attained.

ETIOLOGY AND TREATMENT OF "CHRISTIAN SCIENCE."

About the best comment we have seen on Christian Science for some time is an editorial in The Medical News. Anong many other things, the editor says:

It is still a disputed point whether the primary cause of "Christian Science" was a mental instability or a clever business venture on the part of its founder. Certain it is that she has displayed great cleverness in her personal proof that in Christian Science there is no such thing as poverty. Like an echo of Mrs. Eddy's voice comes from Chicago the message of Dowie, "the prophet," alias Elijah, alias John the Baptist; "Listen to the first message of the prophet. You must pay your tithes and offerings."

The contagiousness of the affection may be attributed largely to a desire for novelty. This is well developed in those in whom ideas of a religious character are absolute strangers, or have never been thoroughly awakened and so appeal as completely new, arousing excitement and enthusiasm as does a "revival." The belief is optimistic—and so attracts pleasure-lovers. These four elements—hysterical excitement, instinctive religious cravings, love of mystery and of pleasure—are the most potent factors in supporting new movements. That which is founded upon the first of these is usually short-lived, and wisely the pseudo-scientists have subordinated this element to the others. The introduction of a garbled religious element is one of the most dangerous features of the so-called science, and its chief aid is the factor of mystery furnished by the meaningless transportations of words in its ritual, and by the adoption of the technic of the quack. The gullibility of the public concerning medical matters is most natural because of their ignorance of these subjects, and those who will accept the ministrations of the advertising "doctors" and "professors" are cer-

tain to be reached by the additional attraction of the religious element, particularly when this inculcates the doctrine that there is no poverty, no pain, no sin.

Christian Science is dangerous because it appeals to those who, unable to follow an argument logically, are led by meaningless but to them high-sounding words. Reaction is sure to follow, as in other movements resting upon unstable bases.

How is this reaction to be hastened and the symptoms of the disease limited? Direct legislation against the so-called Christian Scientists, if it were possible, would merely lend the aid which persecution always does, and would enable them to pose as martyrs, while evasion of any law is possible. Restriction of individual liberty will not be tolerated in this country. It would be difficult to convince many that a man has not the right to his own beliefs, and just this point makes the insertion of the religious element most dangerous. While public opinion condemns the action of the would-be suicide and no difficulty is experienced in securing legislation against one who attempts to take his own life, it is another matter to secure such universal approval of adverse legislation if the same attempt be made under guise of a religious belief. The so-called Christian Scientist does not openly claim the right of suicide or murder, but does so indirectly by his refusal to accept medical aid, and supports his action by the plea of religious conviction—an inviolable matter. Again this defense direct legislation is difficult and of questionable value. It has been shown, too, that forbidding the practice of Christian Science for pecuniary reward would be inefficacious, as this law could be circumvented by the acceptance of gifts from the patient before or after rendering service claimed to be religious in character.

The point which it appears can be controlled by law is the refusal to permit medical care of others, which bears to their own refusal of such assistance the same relation which manslaughter does to suicide. The enforcement of laws making such wilful disregard of the lives of others punishable as manslaughter seems possible and should be effectual. A man is entitled to free enjoyment of his opinions only so long as they do not interfere with the rights of others. No one has the right to sacrifice the life of another for pecuniary gain or in connection with a delusion. If an attempt were made to escape imprisonment for manslaughter under such a law, on the plea that the defendant believed it right, the only logical conclusion would be that he was suffering from a delusion dangerous to others as well as himself and required confinement in an asylum for the insane. Against such offenders the sanitary code cannot be too rigidly enforced as the rights of others are concerned, particularly in relation to contagious diseases. The recent decision of Judge Tuthill, of Chicago, that children of parents who refuse them medical aid when ill should be committed to the care of medical institutions is a step in the right direction. To this extent legislation may go, on the ground of defending the rights of the public, without entering too deeply upon the question whether a so-called religion which justifies manslaughter, suicide, and also immorality by claiming that there is no sin, can fully be interferred with. To this limitation of results it appears that direct treatment of the acute attack of the delusion must be confined.

Prophylaxis is all important. Reaction against the new fad can most surely be brought about by preparing the coming generation for logical consideration of the delusions which will be presented to them. General education is of value in enabling the detection of the fallacies with which the doctrines are so filled, but which are carefully hidden from the mind untrained for analytical thought by the barriers of meaningless phrases. The surest means of attack from a medical standpoint lies not in direct opposition by members of the profession, as this is sure to be ascribed by the followers of Mrs. Eddy and by many others to fear of competion.

Education is the greatest foe of superstition and ignorance, and this applies as fully to the treatment of Christian Science as to the overthrow of the power of the quack. The hold upon the community which the delusion possesses is obviously due largely to lack of knowledge of bodily laws. No one who possesses any connected understanding of anatomy and physiology can fail to see that matter does not exists and is influenced by matter as well as by mind. To such a person the claim that a rubber plant can be treated effectually by Christian Science, or that all bodily ills can be cured by mental influence, seems as false as that perpetual motion can be secured by appeal to that power. Perpetual motion! What a financial possibility for Mrs. Eddy!

A Hint for Laryngologists.

"I have a severe cold," said the sweet singer. "I shall have to use a cough syrup."

"Use only a tar syrup," spoke up the manager.

"Does it make any difference?"

"Yes. Everything depends on the pitch of your voice."—*Exchange.*

BOOK REVIEWS.

A Reference Handbook of the Medical Sciences Embracing the Entire Range of Scientific and Practical Medicines and Allied Science. By Various Writers. A New Edition Completely Revised and Rewritten. Edited by Albert H Buck, M. D., New York City. Volume II. Illustrated by Numerous Chromolithographs and 765 Half-tone and Wood Engravings. Cloth. Pp. 838. Price, $7.00 per volume. New York: William Wood & Co. 1901.

Those familiar with the Reference Handbook of Medical Sciences will welcome this as one of the most important contributions to the literature of medicine of recent times. The work begins with a description of Blastoderm by Charles Sedgwick Minot.

The appearance of this, the second edition shows that it is practically a new work, a great many of the articles being new, and others rewritten and all revised to bring them up-to-date. The articles in this issue are much more complete and full, than in the previous issues, and are therefore more valuable. One third of the volume is taken up with a consideration of the brain and a great deal of it is new. Among the new articles of note, we may mention those on Cephalocele by Dr. Fred Peterson; Cerebellar Diseases by Dr. J. Frankel; Cerebro Spinal Fluid by Dr. H. B. Ferris; Neurosis of the Cerebral Circulation and Histology by Drs. Browning and L. F. Barker, the Development and Growth of the Brain, by Prof. Henrick and Donaldson, and that on the Functions of the Cerebral Cortex by Dr. L. Witner. Of course this is not all the new articles and prominent ones but these indicate how fully and complete the subject has been handled. The subject of cancer has been treated by Dr. W. B. Coley. The illustrations are very numerous and well chosen. The volume is a most valuable one.

Senn's Practical Surgery. Practical Surgery: A Work for the General Practitioner. By Nicholas Senn, M.D., Ph. D., L.L. D., Professor of Surgery, Rush Medical College, Chicago. Handsome octavo volume of 1,133 pages, with 650 illustrations, many in colors. Philadelphia and London: W. B. Saunders & Co., 1901. Cloth, $6.00, net.

The contents of this book is expressed in its name, "Practical Surgery." Practical Surgery is the surgery the general practitioneer meets with every day and it is this practical, emergency surgery he must qualify himself to treat with credit to himself and with benefit to his patient. The surgical field of the general practitioner is limited, yet it is a very unfortunate field, and one that he will always be called upon to treat, regardless of the number of specialist in this line who may be handy.

To be familiar with surgical diagnosis and such other material as to enable him to act wisely and safely in all surgical cases he must keep abreast by his own experience and from high-class literature. This is a high-class work from a high-class writer and surgeon and a work that deals only with those subjects that come within the legitimate sphere of the daily routine work of every practicing physician. The most important subjects have been discussed at great length—their importance, both from a surgical and clinical standpoint demand this. Intestinal surgery receives due and careful attention.

The writer is a great admirer of the entire work. One interesting section noted is the one devoted to Antiseptics. It is very simple in detail, but very valuable. There are no two chapters in the work more valuable and instructive than those on Peritonitis and Appendicitis. They have been most carefully prepared. The subjects of shock, hemorrhage and wound treatment are fully considered. All the operations with which the general practitioner has to deal with have been carefully outlined in detail and fully illustrated. The Section on Military Surgery is based on the author's experience as chief of the operating staff in the field during the Spanish-American War, and on his operations during the Greco-Turkish War. The text is beautifully illustrated, the printing and binding excellent. The book from every standpoint is the best issued upon the subjects treated, and with much pleasure do we commend it to our readers.

The Hygiene of Transmissible Diseases: Their Causation, Modes of Dissimination and Methods of Prevention. By A. C. Abbott, M.D., Professor of Hygiene and Bacteriology, University of Pennsylvania, Third Edition, Revised and Enlarged. Octavo, 351 pages, with numerous illustrations. Philadelphia and London: W. B. Saunders & Co. Cloth, $2.50 net.

This is the third edition of this important and valuable work. No branch of medicine should receive more careful attention and consideration than the subject of Hygiene. This book contains 350 pages and is a portion of Dr. Abbott's lectures on General Hygiene at the University of Pennsylvania. In the introductory the author defines Hygine as a science that deals with the laws of health in the broadest sense. "Hygiene is not so much a study of

man as a study of man's surroundings, with a view of determining in how far these are conducive or detrimental to his well being." Section I is devoted to The Causation of Disease. The causative factors in disease are manifold, says the author; they differ in nature the one from the other, and are of varying degrees of importance in their relation to morbid conditions. Under this head is included Predisposing Causes of Disease, Age, Race, Occupation, Diversity of Population, Heredity, Season, &c. Section II is devoted to Transmissible Diseases. This Section, the writer says, comprises brief sketches of the Commoner Transmissible Diseases, with a summary of points that are of importance to the hygienest, such as the causation, modes of dissemination, portals of infection, prophylaxis against, and the geographical distribution of such diseases. Typhoid fever is the first disease mentioned under this Section. It is defined as an acute infective process that is characterized by marked evidences of intoxication, the cause being given to the bacillus typhosus of Eberth and Goffky. The disease is not contagious, but results from actually swallowing materials that have come directly or indirectly from the bowels of individuals affected with the disease. The author is very emphatic as to the method of infection and we agree with him exactly. This Section on Typhoid Fever is excellent. The next diseases considered are Asiatic Cholera, Dysentery, Tuberculosis, Diptheria, Epidemic Cerebro Spinal Meningitis, Influenza, Bubonic Plague, and Suppurative and Septic Infections. The cause, prophylaxis and the methods of prevention of each of these diseases are given fully, completely and clearly. The Section on Malarial Fever is well written and is a most valuable contribution. Each Section has been written with much care and pains. The writer is short, decisive and to the point. You find what you want concerning a given subject in the writer's easy, plain way of putting it. The work is certainly one to be much admired and studied. It is handsomely bound, beautifully printed, and we can not commend it to our readers too highly.

Diseases of the intestines, By. Dr. I. Boas, Specialists for Gastro-Intestinal Diseases in Berlin, authorized Transalation from the first edition, with special additions, By Seymour Bash, M. D., New York City. "Nec ultra, nec infra scire," 47 illustrations, 560 pages, 8vo, Prices, Cloth, $5.00; Sheep, $6.00. D. Appleton & Co, Publishers, 72 Fifth Avenue, New York, 1901.

This is a valuable work on the diagnosis treatment of the diseases of the gastro-intestinal tract. Special prominence has been given to the diseases which the general practitioner is called upon to treat in every day practice, such as intestinal catarrhs and ulcers, duodnal ulcers, chronic constipation, rectal disease, intestinal neurosis, etc., these are the most common diseases met with and it must be said the subjects have not received the proper study and care, and as a result the treatment hertofore prescribed nearly always give unsatisfactory results. This is just such a book that we have felt the need of for a long time, and we cannot impress upon the practioneer in too strong terms, its great value and usefulness, the author lays great stress upon the importance of examining the fæces, which has heretofore been neglected. He also emphasizes the fact that abdnominal surgery has made great progress within the last decade in diseases of the intestines. Following this he says that if the medical practitioner wishes to keep abreastof the progress he must follow these advances with the greatest conscientiousness, and consider carefully the change made from time to time in surgical technic, noting the results obtained therefrom. When an operation should be performed, he says, rests entirely with the physician, and the technic with the surgeon, this is a great responsibility, implying the greatest confidence on the part of the patient and family. We know of no work like this one, and to the physician who posseses it will find it of inestimable value. The illutrations are attractive and the publishers are to be congratulated upon the handsome appearance of the volume.

Progressive Medicine, Vol. II, June, 1901. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in Jefferson Medical College of Philadelphia. Octavo, handsomely bound in cloth, 460 pages, with 81 engravings and one full-page plate. Lea Brothers & Co., Philadelphia and New York. Issued quarterly. Price, $10.00.

The second volume of the 1901 series of Progressive Medicine well maintains the high standard of excellence that has marked the preceding issues. It contains articles from four prominent contributors, the first contributor is Dr. William B. Coley, and he treats on Surgery of the Abdomen, special attention being paid to the surgical treatment of malignant diseases of the intestines and rectum. In reference to the operation for hernia, Bossini's operation is

his favorite. In a number of cases treated by this method he has gotten wonderful results. The subject of Gynecology is interestingly discussed by Dr. John G. Clark. Dr. Clark is Professor of Gynecology in the University of Pennsylvania. The renowned pathologist, Alfred Stengel, reviews Diseases of the Blood and Ducless Glands, the Hemorrhogic and Metabolic Diseases. The concluding part is devoted to Ophthalmology by Dr. Edward Jackson. The personality of the celebrated editor, Dr. Hare, of this volume, is sufficient guarantee of its excellences. Handsome illustrations elucidate the text throughout the volume.

Editor and contributors alike are entitled to the thanks of their wide audience for having produced a volume so practical, and yet of a standard creditable to American Medicine.

Favorite prescriptions of distinguished practitioners with notes on treatment, compiled from the published writings or unpublished records of Drs. Fordyce Barker, Roberts, Bartholow, Samuel D. Gross, Austin Flint, Alonzo Clark, Alfred L. Loomis, F. J. Burnstead, T. G. Thomas, H. G. Wood, Wm. H. Goodell, Wm. Pepper, A. Jacobi, J. M. Fothergill, N. S. Davis, J. Marion Sims, Wm. H. Byford, L. A. Duhring, D. Hayes Agnew, E. O. Janeway, J. M. DaCosta, J. Salis Cohen, Germain See, Meridith Clymer, J. Lewis Smith, Floyd M. Crandall, W. H. Thompson, L. Duncan Bulkley, C. E. Brown-Sequard, M. A. Pallen, Alex. J. C. Skene, Geo. H. Fox, W. A. Hammond, E. C. Spitzka L. Emmett Holt, H. A. Hare, etc., etc. Edited by B. W. Palmer, A.M., M.D. Seventh edition. New York: E. B. Treat & Co., 241-243 West 23rd St. 1901. Price, $2.00.

Six large editions of this work have been exhausted and this is the seventh which attests the popularity of the book. Those who have been using the former editions of this book scarcely recognize this new edition as a revision of the old. Many pages of new prescriptions have been added, which makes it a most judicious compilation and cannot but be popular with those who have a leaning toward formularies. It is a very convenient book of reference, and to the busy practitioner it must be of great help. The design of this book as stated by the editor is to render more available for everyday use and guidance the practial treasures of medical wisdom which have been gathered from the earnest labors and careful observations of the most distinguished practitioners of the age. The publishers have made a neat and serviceable volume of this book.

Annual and Encyclopedia of Practical Medicine, by Charles E. de M. Sajous, M. D., and one hundred Associate Editors, assisted by Correspohding Editors, Collaborators and Correspondents. Illustrated with Chromo-Lithographs, Engravings and Maps. Vol. VI. Philadelphia, New York, Chicago: F. A. Davis Company, Publishers, 1901.

This volume is the last of the first series of the present work. The author promised us a great deal in the preface of the first volume, and to veryfy that he has fulfilled his promises. One has to but refer to the voluminous index given at the end of the present volume—a mass of literature never before brought together within the limits of six books. The work not only presents all the general diseases usually described in text-books, but also what progressive features the past decade has furnished. Nearly all subjects contain excerpts from literature. In this work the subject of surgery has been given prominent mention. The subject of "Obstetrics" is clearly and fully considered. "Therapeutics" have been carefully considerrd. Each subject considered is still more or less used. The many specialties have received due attention, thus giving the general practitioner a clear outline of the entire field of practical medicine.

The definition of each subject is given with synonyms, also the symptoms, diagnosis, etiology and pathology, prognosis, and treatment. Each section, to each subject, is treated in a short, concise way. Large block type is used for important headings. This volume contains a large number of very valuable articles, most notable of which are, "Rheumatism," by Dr. Levison, of Copenhagen; "Diseases of the Stomach," by Prof. D. D. Stewart, of Philadelphia; "Surgery of the Stomach and Intestines," by Prof. W. W. Keen and M. B. Linker, of Philadelphia; "Surgery of the Spine," by Prof. R. H. Sayre, of New York; "Syphilis," by Prof. G. F. Lydston, of Chicago; "Surgery of the Urinary System," by Prof. J. W. White and Dr. A. C. Wood, of Philadelphia; "Diseases of the Uterus," by H. L. Byford, of Chicago; and "Diseases of the Uterine Adnexa," by Prof. E. E. Montgomery, of Philadelphia; and "Wounds and Injuries of the Chest," by Prof. L. A. Stimson, and Dr. E. L. Keyes, Jr., of New York; and Yel'ow Fever," by Surgeon-General Wyman, of Washington. These writers are well known and their writings are looked upon as authority. This volume has a "General Index," which is a feature of the work, and will greatly assist the reader in locating the articles in which a given subject is treated. The author is to be congratulated upon the excellence of

his work. He has spent many hours of labor upon this work and we feel sure he will be amply rewarded. The publishers have performed their work in handsome style. We commend the work as most modern and a safe work to follow.

Saunders' Question Compends Essentials of Refraction and of Diseases of the Eye. By Edward Jackson, A. M., M. D., Emeritus Professor of Diseases of the Eye in the Philadelphia Polyclinic. Third Edition, Revised and Enlarged. 12mo., 261 pages, 82 illustrations. Philadelphia and London: W. B. Saunders & Co., 1901- Cloth $1.00 net.

In this edition the work has been carefully revised and much enlarged, the contents being more complete and more symmetrical than was possible in the earlier editions. The injuries of the eye by traumation, and the ocular symptoms and lesions of general diseases have now been given a consideration proportioned to the great importance they assume in the work of the general practioner. There has been added also an account of the application of the tests of vision required in the army, navy and railway service.

This work has long since proved its usefulness to the beginner in opthalmic work, to the student, and to the busy practitioner. Dr. Jackson, its author, is well known as a successful teacher. The entire ground is covered, and the points that most need careful elucidation are made clear and easy.

How to examine for life insurance, by Frank Ring, M. D., Medical Examiner for John Hancock Mutual Life Insurance Co., of Boston; Prudential Life Insurance Co., of Newark, N. J.; Security Trust and Life Insurance Co., of New York. 12mo. handsomely bound in silk cloth. Over 100 pages. $1.00 net. Charles D. Wilcox, Publisher, 2313 Washington Avenue, St. Louis Mo.

The author has endeavored to present the views of the Medical Directors, as culled or abstracted from their instructions, their public expressions before Insurance and Medical Associations, and their correspondence with Medical Examiners.

A composite form is taken, and the reasons and explanations for each question are given.

Its plan of arrangement is such as to make it a book of ready reference. It thoroughly discusses Physicial Diagnosis and Clinical Signs in their direct connection with the Life Insurance Examiner's work.

The relations of the examiner with the agent, applicant and home office are treated in a practical and complete manner, sources of friction and misunderstanding being fully explained.

It contains a composite photograph, so to speak, of the best thoughts of the best men.

The necessity for correct methods of procedure and up-to-date technique is emphasized, and the best means of elicting information from physical signs purposely obscured and giving them proper interpretation and value are carefully explained.

As a Text-Book of Physical Diagnosis this will be found a useful and practical guide, and the more valuable because it is prepared for the man who is carefully searching for signs and symptoms of disease in the apparently healthy subject.

Surgical Experiences in South Africa, 1899-1900. Being Mainly a Clinical Study of the Nature and Effects of Injuries Produced by Bullets of Small Calibre. By George Henry Makins, F.R.C.S., London. Smith, Elder & Co., 15 Waterloo Place. 1900.

The following work gives an account of personal experience of the gun-shot wounds observed during the South African campaign in 1899 and 1900. It will be noted that the experience of the writer has been principally with bullet wounds. This is all to the advantage of the men wounded, except in so far as the increased possibilities of the range of fire may augment the number of individuals hit. The writer describes the campaign very graphically and innterestingly. He tells of his field transport, hospital ships, types of rifles, the general character of wounds produced by bullets of small calibre; the effects of ricochet on different bullets. One interesting part of the book is the description of the different forms of fractures and the treatment. The illustrations here are fine. The chapters on Injuries to the Joints, Head and Neck, Fractures of the Base, &c., are all very excellently prepared and quite instructive. The illustrations throughout the book are one of its beautiful features. It is well bound and the printing is excellent.

The Diseases of the Respiratory Organs, Acute and Chronic. Arranged in Two Parts and Interwound for Supplemental Notes. By William F. Waugh, A.M., M.D., Professor of Practice and Clinical Medicine, Illinois Medical College. The Clinic Publishing Company, Chicago, 1901.

This volume forms part of the writer's forth-coming treatise on the Practice of Medicine. In this work the author has presented the subject in as condensed form as possible, giving the modern views without discussion or matter of historical interest alone. In the portion relating to the

pathology of the maladies under consideration he has availed himself of the latest text books. The section devoted to therapeutics will be found to contain much that is new to many, indicating a wide departure from the classic methods. The book has been interwound which gives the reader an opportunity to make liberal notes, add to or modify the views expressed in this book. The book is neatly printed and well bound.

The Early Empire Builders of the Great West. By Moses K. Armstrong, a Pioneer Congressman. Published by E. W. Porter, St. Paul, Minn. · 1901.

This volume is compiled from the author's Early History of Dakota Territory" published in 1866, to which are here added other pioneer sketches of early adventures, Indian wars, overland journeys, and pen pictures of pioneer law-makers in the legislature and in Congress thirty and forty years ago. Mr. Armstrong was one of the early pioneers of 1859 and the first historian of the Great Territory of Dakota. The book is written with much of the spice of Western romance and graphic language used in pioneer days. The illustrations are superb. The book on the whole is thrilling and interesting. It is well bound and printed.

Etidorhpa, or the End of the Earth. By John Uri S. Lloyd. Eleventh Edition, Revised and Enlarged. New York. Dodd Mead & Co. 1901.

This book gives a strange history of a mysterious being and the account of a remarkable journey. This book was first published in 1895. The discussions which followed led to successive editions the present being the eleventh. Etidorhpa consists not only of a story within a story, but that the chapters in the latter part of the book are closely connected with preceding incidents, thus bringing to the readers attention phases of thought which might otherwise be overlooked or neglected. The book is tastefully bound and clearly printed.

The History of Mineesota and Tales of the Frontier. By Judge Charles E. Flandrau. Published by E. W. Porter, St. Paul, Minnesota.

This history is written in the most compendious form consistent with a full presentation and discussion of all the facts concerning the creation and growth of the state. The author accompanies the history with a series of "Fontier Stories" written by himself at different times during his long residence in the North-west, which embrace historical events, personal adventures, and amusing incidents. The work is a well written history and we speak for it a large sale.

Proceedings of the Ninth Annual Meeting of the Association of Military Surgeons of the United States Held at New York City May 31, June 1st and 2nd., 1900; Chicago, R. R. Donnelley & Sons, Co. 1901.

This volume contains over five hundred pages, and is probably the most complete transactions that appear in print. It contains the minutes of the meeting and the valuable papers presented at the last meeting of this important Medical Society and contains much matter of great value. Its appearance is an excellent testimony to the industry and efficiency of the Secretary Lt. Col. Charles Adams of Chicago.

Transactions of the Eclectic Medical Society of the State of New York. Fortieth Annual Meeting held at Syracuse. Edited by Geo. W. Boskwitz, A.M., M.D.

This book includes the Minutes, Reports, Essays, &c., of this meeting. S. A. Hardy is Secretary and F. C. Maxon is President. The volume contains some very good papers which are properly discussed. It is bound in good binding and clearly printed.

LITERARY NOTES.

The August Forum opens with an article by Mr. Albert Watkins on "The Failure of the Two-Party System." It points out the advantages of the system of groups, which is a characteristic of German politics. Mr. G. W. Clarke shows the significance of "The Government Exhibit at Buffalo." The lessons of "The President's Tour" are discussed by Mr. Henry Litchfield West, who was among the journalists included in the party of distinguished tourists. Another Washington correspondent, Mr. Francis E. Leupp, reveals some serious "Defects in Our Pension System," with striking illustrations of these abuses. Mr. Henry Gannett warns against certain common "Statistical Blunders." In a paper entitled "The American Workman's Golden Age'" Mr. W. J. Ghent makes it plain, from the testimony of contemporary authorities at various periods, that it is a mistake to suppose that the condition of workingmen in this country has been undergoing a process of deterioration. Mr. Charles A. Conant's article on "The Uses of Speculation" clears up some of the popular misunderstandings of the operations of the Stock Exchange. The functions of "The

Spantsh Treaty Claims Commission" are set forth by Mr. J. I. Rodriguez, who challenges its constitution of itself into a court of common law. "Pacification by Arson" is the title of an anonymous protest against the recent farm-burnings in South Africa. Prof. J. H. Gore shows the conneetion between "The Metric System and International Commerce." The question "Is the Actor Illiterate?" is answered by Mr. Stuart Robson. Prof. W. P. Trent contributes an appreciation of the character and writings of the late Prof. Moses Coit Tyler.

The Cosmopolitan for August is, as usual, rich in fiction, remarkable both for its vivid interest and its great variety. Irving Bacheller writes a refreshing story of the Canadian big-timber region, and Hering's drawings catch the spirit of the scene perfectly. A. T. Quiller-Couch's ("Q.") pathetic little tale cannot fail to enlist our sympathies with the French exile who broke his parole for love. Richard Le Gallienne tells the most charming and least known of the quaint "Old French Romances"—the love of honest Squire Robin for the Fair Jehane. "The Temple of Fate," the late Grant Allen's clever satire on modern society, is certain not only to entertain the reader, but also to set him thinking. Francis Willing Wharton writes a pretty story of fashionable Newport society—a subject with which she is thoroughly at home; while Phœbe Lyde and Egerton Castle handle strong subjects in a masterly manner.

Scribner's Magazine for August is the annual Fiction Number, and it contains seven complete short stories, the beginning of a new serial, and special illustrated articles and poems. The color-printing is shown at its best in the exquisite work of Maxfield Parrish, who has found a very congenial subject in Quiller-Couch's story of the Cornish coast, which has to do with a classical legend. These drawings are the most remarkable in color which have been yet attempted. There is also a beautiful cover-design by Albert Herter, which it has taken ten printings to reproduce.

ABSTRACTS of One Hundred of the Leading Articles of the Month.

A Chat About Tobacco.

The chief and characteristic constituent of tobacco is, everybody knows, the alkaloid nicotine, to which the plant owes it remarkable properties—now seatine, now stimulant, and in either case, toxic, in a greater or less degree. H. Wilson Hoke, in brief says:

A question which frequently arises in connection with tobacco is, which is the least injurious form of smoking—the pipe, the cigar, or the cigarette? It is a question by no means easy to answer, inasmuch as in addition to other considerations the percentage of nicotine in and the quality of the tobacco must be taken into account. All these forms of smoking may be more or less correctly described as processes of dry distillation; this is especially so in the pipe, while in the cigarette the combustion of the tobacco must be most complete; the cigar would stand midway in such a classification. Hence the cigarette (obviously in moderatio), must be pronounced the least harmful, and especially when made of Turkish or Egyptian tobacco. No doubt such a decision will be much disputed, especially by the pipe or cigar smoker, and there are some counter-arguments which should not be ignored; thus a pipe up to a certain point condenses and absorbs much of the nicotine, but it is well known that the seasoned smoker loves a "seasoned" pipe—some detractors call it a foul one. Again, the usually fine tobacco in a cigar, as already been pointed out, often contains as little as two per cent of nicotine.

No argument will avail to change the currents of men's habits in smoking, but perhaps this article may furnish fresh argument, for or against, and will place some smokers in possession of the more strictly scientific view of the subject.

That smoking has increased of late years is common knowledge, and it is an interesting fact that most eminent men have been addicted to the habit. It would lead me too far to consider this side of the subject, but it has attractions and may serve for future observation. How many of my readers, I wonder, will disagree with Kingsley's eloquent praise of the weed, as voiced by Yeo in "Westward Ho," who declares it to be "a lone man's companion, a bachelor's friend, a hungry man's food, a sad man's cordial, a wakeful man's sleep, and a chilly man's fire."

Alimentary System in Convalescence.

Flexner (Medical News) in writing of unusual forms of typhoidal infection believes that a localized cholecystitis or infection of the gall-bladder will eventually be recognized. Camac believes that infection of the gall-bladder by the bacillus typhosus occurs from the intestinal tract, and that the bacilli may lie dormant, causing no disturbance for long periods, even years.

If, however, gall stones are present or there is mucous formation, a cholecystitis may develop with ulceration and perforation. Horton Smith points out the analogy existing between the urinary and gall-bladder. In the latter, just as in the former, typhoid bacilli may gain entrance without causing any disturbance. Smith is of the opinion that these secondary infections are brought about by the transference of the bacilli through the blood stream. That the typhoid bacillus is not the only cause of cholecystitis during typhoid fever is shown by bacteriological examination. Marsden in reporting a case of cholecystitis caused by the bacillus coli communis states that this germ is not an infrequent cause of the condition. Cushing has reported five cases of post-typhoidal cholecystitis in which pure cultures of the bacillus coli communis were isolated. Richardson has also stated that the frequency of its presence seems to have been an important bearing in producing gall-bladder infections.

The After Treatment of Operation on the Nasal Accessory Sinuses.

The after-treatment of any operation is very important and a great deal depends upon the manner in which it is carried out and if the surgeon be careful, conscentious and intelligent he will personally supervise every detail of the after-treatment of his case. Walter A. Wells, in the Boston Medical and Surgical Journal, reports several cases of this disease, and asserts from the foregoing consideration, and our experience in general the main points in the after-treatment of operation upon the nasal accessory sinuses may be stated as follows:

1. Persistence of suppuration after operation is generally to be sought in one or several of the following causes. Syphilis or tuberculosis in the patient; incompleteness of the operation; presence of polypi or other obstructive condition in the nose; an empyema in a neighboring sinus; inadequacy of the local treatment.

2. The after-treatment requires that not merely the antiseptic applications to the sinus, but that the patient's general state of health, must be investigated, and a careful supervision constantly maintained over the condition of the nasal fossa. The latter must be kept free of secretions, and polypi and other obstructing conditions removed whenever found.

3. Emypema in a neighboring sinus, whose ostium is in close relation with the sinus operated on, will maintain the suppuration in the latter, unless cured. The frontal is frequently the cause of antrum disease, and the ethmoid the cause or the effect of disease of both the antrum and the frontal sinus.

4. The cause for the continuance of the suppuration is attributable in many cases to the fact that all diseased tissue was not removed at the time of the operation. The irregularities and anomalies in the form of the sinus are often responsible for the failure to have reached every point where disease was located. In such cases curettage of the sinus must be repeated from time to time according to the indications.

5. The institution of the proper local after-treatment is a matter of extreme importance. The so-called dry treatment is insufficient and unscientific, because it does not provide for the removal of the products of suppuration; only a mass of powder is superadded to a mass of decomposing debris, whereby an unabsorbale accumulation results, which may retard recovery and give rise to unpleasant symptoms.

6. Frequent and thorough irrigations constitute the most rational method of treatment. Protargol in 2 to 5% solution has given the most favorable results, especially when alternated with a thorough swabbing of all parts of the inner wall of the sinus with a 20 to 40% solution in water and glycerine.

7. Immediately after operation the sinus should be packed with iodoform gauze, which remains in place from thirty-six to forty-eight hours. Subsequently the sinus is irrigated daily, and later on every other day. A thorough rubbing of the walls of the sinus is made with the solution mentioned every three, four or five days, according to individual requirements.

The Advantages and Disadvantages of Drainage after Abdnominal Operatives.

During the past four years our ideas regarding the necessity for, and the efficacy of drainage in abdnominal surgery have under gone the most radical changes. It has only been in the last few years that we venture to close an abdominal section absolutely, but left in a large tube which reached well down into the tissues. Hunter Robb, in Journal American Medical Association only in 1890, summarized the indications for drainage as follows:

1, To provide a means of escape for the serous oozing which follows the separation of broad adherent surfaces; 2, to guard against septic peritonitis from retained pus from the tube, ovary, or other viscus; 3, to remove fluid in cases of persistent capillary hemorrhage; 4, to provide against hemorrhage in cases of hysterectomy when the pe-

dicle is dropped; 5, to drain the peritoneal cavity and starve out the disease in cases of chronic or tubercular peritonitis.

Just a year later the same writer, after making bactericologic examinations of the secretions found in the drainage tube and upon the gauze placed on the tube was after the cause of infection. As a consequence of these examinations, Prof. Welch of John Hopkins Hospital formulated objections to the use of the drainage tube which are as follows:

"1. They tend to remove bacteria which may have gotten into a wound from the bactericidal influence of the tissues and animal juices. 2. Bacteria may travel by continuous growth or in other ways down the sides of a drainage-tube, and so penetrate into a wound which they otherwise would not enter. We have repeatedly been able to demonstrate this mode of entrance into a wound of the white staphylococcus found so commonly in the epidermis. The danger of leaving any part of the drainage tube exposed to the air is too evident to require mention. 3. The changing of dressings necessitated by the presence of drainage tubes increass in proportion to its frequency the chances of accidental infection. 4. The drainage-tube keeps asunder tissues which might otherwise immediately unite. 5. Its presence as a foreign body is an irritant and increases exudation. 6. The withdrawal of tubes left for any considerable time in wounds breaks up forming granulations—a circumstances which both prolongs the process of repair and opens the way for infection. Granulation tissue is an obstacle to the invasion of pathogenic bacteria from the surface, as has been proved by experiment. 7. After the removal of the tube there is left a track prone to suppurate and often slow in healing." To these Professor Halstead has added: 8. "Tissues which have been exposed to the drainage-tube are suffering from an insult which more or less impairs their vitality and hence their ability to destroy or inhibit organisms."

Actmotherapy in Cutaneous Medicine.

The employment of light as a therapeutic agent is no new thing in medicine. The bactericide action of light, is now an established and well known fact. The most virulent cultures, and microbes die in a short time when exposed to properly concentrated light. William S. Gattheil has a fine article in Journal American Medical Association for July 6th on this subject. He is a great believer in its theraputic properties. He says it invitates the cutaneous nerves, and so affects the central nervous system. It increases the oxidation processes in the cells, and the amount of hemoglobin in the blood. It is recommended in lupus and the various demol tuberculosis. It has been used in lupus epitheomatous, psoricasis, epithelioma, acne vulgaris, rosacea, adopecia areata, eczema, ringworm, contageous impetigo, and various other ulcerations with success. The writer cites two cases, one of lupus vulgarious, and an obstinate tertiory syphititic ulcerations of the leg. The process is one of interstitial absorption. Either sunlight or the arc light can be employed, but the former is too uncertain in most parts of our country to be relied upon. It is eminently conservative. It is entirely painless. It is effective.

Aspergillus Keratitis.

This is a rare disease. It is a variety of cervical inflammation which only 8 or 10 writers have observed. Not over a dozzen cases are described in literature. James Moor's Ball, in American Medicine, thinks it a much more common disease than has been supposed by writers on Ophthalmology. He emphasizes the symptoms of intense pain in the eye, followed by the development of a brownish or black mass within the substance of the cornea which are pathognomonic of this disease. Remove of the mass early in the case is followed by uninterrupted cure. Failure to recognize the condition and apply proper treatment is followed by sloughing of the cornea and in some cases by loss of the eye. In a few cases of Keratomycosis Aspergillina where cultures have been made, only Aspergillus fumgatus has been found.

A Botanist Censured.

The Medical Press cites an incident where a Leeds botanist, who had supplied pennyroyal pills to a woman who had subsequently aborted and succumbed to peritonitis, has been "answered" by the coroner and advised to abstain in future from dealing with medicines of this class. Whatever the abortifacient value of this drug may be, there seems to have been little doubt as to the intention with which they were procured, and it is odd that the jury did not emphasize the "intent."

This is one instance where these pills must have proven effective. They are sold in these states promiscuously. There seems to be very little virtue in their use, the above incident being an exception. Should they prove at all reliable their sale should be classed as morphine, strychnin and other dangerous drugs.

Bottini s Operation in the Treatment of Prostatic Hypertrophy.

I had rather treat twenty cases of typhoid fever than one of prostatic hypertrophy, no drug, serum or glandular extract has yet been discovered which has decided curative propertis.

Bottini's method, says Leonard Freeman in American Journal of Surgery and Gynecology, has grown in form in the last few years.

By means of a concealed platinum knife, heated to a white heat by electricity, one or more deep furrows are burned through the prostate gland, especially through the middle lobe, thus opening up a channel, lowering the floor of the urethra, and encouraging the evacuation of residual urine —the chief cause of disagreeable symptoms. During this manipulation the bladder is kept out of the way by dilating it with air or water.

The operation has a decided number of advantages:

1. Marked improvement is obtained in the great majority of instances—about 85 per cent. according to Freudenberg, of Berlin, who has collected 753 cases. Complete failures are uncommon, while relapses are rare. In all operations on prostatics, however, we are often forced to content ourselves with "marked improvement," rather than "cures." We cannot supply new genito-urinary systems in place of those which have been hopelessly deranged. If the kidneys are diseased, for instances the urine will remain cloudy, no difference how free a channel may be provided for its exit. If the bladder contains diverticula, or if its thickened walls have been irretrievably damaged by long-continued inflammation, complete recovery cannot be expected, although it is surprising what favorable results are at times obtained in the face of the most adverse circumstances.

2. The mortality is low, between 4¼ and 5½ per cent. (Freudenberg); substantially less than that of prostatectomy or castration, and approximating that the vasectomy.

3. The amount of inconvenience and suffering is comparatively slight in the great majority of instances—often less than the patient experiences in the usual course of his disease. In this condition I have observed that the drinking of large quantities of water before and after the operation contributes much to safety and comfort, the bladder washing, as it were, itself, Copious injections of warm water into the bowels are also of service. Since I have paid special attention to dilution of the urine, my last six operations have given rise to extremely few annoying symptoms.

The operation is done in a few minutes, under cocaine or eucaine. Pain is seldom great and always bearable. The patient is permitted to leave his bed in a day or two. Distress and dysuria, if they occur, can be obviated by a retention-catheter, especially at night. Urine, however, may be passed voluntarily, so that even occasionally catherization is not required. My last patient, upon whom I operated a week ago, has not been catherized at all.

4. A strong feature of the Bottini operation is that it does not inspire so much resistance, not to say dread and aversion, as other methods. There is no open wound or cutting with a knife, no mutilation. The work is done entirely through the urethra, and with little or no bleeding. A general anesthetic is not required; a point of paramount importance in old and feeble men with insufficient kidneys. And, in addition, the fear of an anesthetic often decides such a patient against an operation which might be of benefit to nim. There is practically no confinement to bed, thus avoiding the considerable danger of hypostatic congestion so easily produced and so fatal in the aged.

A feature well worthy of consideration is that if the Bottini operation fail the first time, it can be repeated with every prospect of ultimate success. This manifestly cannot be done with prostatectomy, vasectomy, or castration

After Treatment of Summer Diarrhea.

This, according to Taylor, in The Journal of the American Medical Association, is essentially hygienic and dietetic. Of the various prepared foods the most satisfactory is cow's milk with dextrinized barley-water as a diluent. He describes the method of making the perceneage of milk and cautious against beginning with too high a percentage. A good plan he says is to decide on the number of feedings, the amount of sugar, cream and diluent to be taken by the child. For example, he would take three ounces of whole milk, one dram each of sugar and cream, and three ounces of barley-gruel. Seven feedings of this amount in proportion may be given in the twenty-four hours. The gruel is prepared by adding two full tablespoonfuls of barley-flour to one quart of water and boiling for fifteen t› twenty minutes. Then add two teaspoonfuls of Cereo, or dextrinize the barley water with any other reliable preparation. If the above treatment fails, ku myss stands next in his estimation. Beef juice three times a day is of value. If the child is two or three years old beef, mutton

and chicken broths with fat carefully removed, and dry toast, etc., may be given. Inunctions of cod liver oil are especially indicated in children with sluggish circulation. Tonics are nearly always needed, and the syrup of ferric iodid seems the best of all forms of iron treatment. Other requisites are the relief of constipation by abdominal massage if possible, or some laxative, such as the fluid extract of cascara—from 5 to 8 drops in older children—and lancing of gums if required; a morning sponge bath and life in the open air in the daytime as far as possible and in a well ventilated sleeping room at night. High irrigation of the colon with normal saline solution is better for the mucous colitis following summer diarrhea than any remedies.

Cocain Habit.

A pen picture of the cocain habitue is graphically given in an interesting article in the Medical Standard by T. D Crothers. He says:

The cocain addiction has been called the third great scourge of the world—alcohol and opium addictions being the first and second. The most remarkable fact is that only a small part of the cocain imported and used is known to go into legitimate channels. An inqiry in Philadelphia showed that sixty per cent. of the cocain was sold and used in unknown ways. It is extremely difficult to know how far its addiction has extended. The frequency of the cases is becoming more and more apparent, particularly in the large centers. Usually the cocain taker has had a previous experience with morphin and spirits, and finds the cocain a great improvement over the two. From this drug he gets mental exhileration and physical satisfaction without any of the depressions which follow the use of the other drugs. It is noted that emaciation and rapid decline of both the physical and mental activities are very marked in the opium case which becomes a cocain-taker. A pleasing state of mental exaltation and volubility follows its use. The mind seems to run on with great rapidity, the thoughts flow with confused medley without point of conclusion, interlaced and combined with all sorts of ideas, fears and credulities. This mental condition seems to be without conception of time or present condition, passing from all grades of hallucinations and delusions of suspicion, credulity and good humor to states of imbecility and sleep. In some instances great assertiveness with indecisiveness of thought follow in a confusing medley,

The principal delusion characteristic in most cases is that of parasitic infection principally of insects crawling over the skin, marked by itching and uncomfortable feelings. Delusions of persecution, not only to himself but to others, often rouse indignation and efforts to correct them. Oftentimes it is self-accusation, and is followed by crime, generally suicide to escape from his pursuers. During all this time there is a reasoning mania with the pleasing imagination that invests objects near and far away with personal interests.

In some instances intense depression follows alternated with transient exaltation. His voice and manner give evidence of his mental condition. The soft, persuasive tones, and the smiling, affable appearance and supreme consciousness of his great vigor and perfect strength is characteristic. He believes his condition is exagerated by his friends and that he does not need to make any exertion himself, that the effects of the drug are not dangerous but rather helpful, enabling him to do what would be impossible to do otherwise. His personal appearance is greatly changed; anemia, glassy staring eye; nervous, trembling walk, which becomes more feeble as the effects of the drug wear off. His digestion is impaired, and often convulsions and partial unconsciousness of short duration follow. Attacks of sudden melancholia may end in suicide or some violent act. The effect of cocain on the mind is remarkable in destroying the moral sense first. All consciousness of right and wrong, of duty and obligation and pride of personal appearance disappear early. He may seem physically to be very little different except anemia and general nervousness. Mentally he will be optimistic and extremely voluble but morally he will be uterly depraved, irresponsible and unreliable to the last degree. These conditions rapidly merge into imbecility, suicide or acute mania. The delusions take on an imaginative character often very interesting psychologically as indicating the dominance of certain brain sections and functions.

The Cause of Death After Abdominal Operations.

No surgeon should ever make the remark that there is no danger in an operation. Louis Frank, in The American Practitioner, gives some of the cases of death after abdominal operations.

Operation per se. Under this head he includes shock and primary hemorrage.

Death Due to Anaesthesia. Death on the table is one of the most horrible accidents which may happen and yet it is liable to

occur at any time without a minute's notice.

Death from Secondary Hemorrage and Septic Processes.—With all our perfect methods these are the most frequent causes of death to-day.

Bad after management is sometimes the cause of death. No matter how skillful the operation, bad management may be the cause of many fatalities. The writer thinks sweet milk has done much harm to laparotomy cases. Then there are some miscellaneous causes, such as accidental obstruction from Murphy's button or hypertactic pneumonia. Considering all the causes we find that sepsis in one of its various manifestations still claims most victories.

Chronic Fluorine Poisoning.

Fluorine preparations are regarded as non-poisonous, and have been recommended of late as food preservatives and as therapeutic agents. Feritz Schevyzer writing in the New York Medical Journal, sets forth the fact that the salts of fluorine produce under certain canditions dangerous effects, and should, therefore, be used with caution. He says it has a cumulative action under certain conditions. In small doses, it is a relatively harmless preservative agent; but as soon as it is given chance to accumulate in the body through continued administration it becomes dangerous, and its employment should be prohibited by law. This applies especially to beverages and food stuffs that are consumed regularly and in large quantities, particularly beer, green vegetables, milk and meat.

The Cause of Diffuse Peritonitis Complicating Appendicitis and Its Prevention.

In the Medical Press and Circular of July 17th, 1901, Ochsner gives the following important conclusions concerning this subject:

1. Peristaltic motion of the small intestines is the chief means of carrying the infection from the perforated or gangrenous appendix to the other portions of the peritoneum, changing a circumscribed into a general peritonitis.

2. This can be prevented by prohibiting the use of every kind of food and cathartics by mouth, and by employing gastric lavage in every case in which there are remnants of food in the stomach or in the intestines above the ileo-cæcal valve, as indicated by the presence of nausea, or vomiting, or meteorism.

3. The patient can be supported by the use of concentrated predigested food administered as enemata not oftener than once in four hours, and not in larger quantities than four ounces at a time.

4. This form of treatment, when instituted early, will change the most violent and dangerous form of acute perforative or gangrenous appendicitis into a comparatively mild and harmless form.

5. Cases of perforative or gangrenous appendicitis, with beginning general peritonitis, can usually be carried through the acute attack safely with this method.

6. In all cases of this class gastric lavage should be practised in order to prevent the absorption of decomposing material from the alimentary canal.

7. In cases of doubtful diagnosis this form of treatment should always be employed.

8. This treatment will prevent a large proportion of the most troublesome complications and sequelæ of appendicitis, such as ventral hernia, fæcal fistulæ, extensive adhesions, &c.

9. The patient should be permitted to recover fully from his acute attack before an operation is performed, except in cases encountered within the first thirty-six hours after the beginning of an attack or in case of the formation of a superficial circumscribed abscess.

10. It often requires but a small amount of any kind of food to change a harmless circumscribed into a dangerous diffuse peritonitis.

11. The treatment does not protect the patient against a subsequent attack.

12. It does not contraindicate the removal of a diseased appendix before the septic material has extended beyond this organ.

13. It is indicated in all intra-abdominal conditions in which it is desirable to prevent the distribution of septic material by means of peristaltic motion.

14. The laity should be taught to stop feeding and giving cathartics to patients suffering from intra-abdominal diseases.

Clinical Observations in Pericarditis.

Dr. Frank Billings of Chicago states (Boston Medical and Surgical Journal) that pericarditis is essentially a secondary process occurring in the course of some general infection. The local manifestations may be so slight as to escape observation, and the general symptoms to which the local disease may give rise may be obsured by the constitutional disturbance of the primary general infections. Therefore it often happens that the diagnosis of pericarditis is more often made at autopsy than clinically. The histories of several cases were given which illustrated pericarditis of several varieties, etiologically considered,

which presented clinically, as far as the heart and pericardium were concerned, practically the same signs and symptoms. The cases further illustrated the importance of the three cardinal signs of pericarditis; namely, the pericardial friction rub, the form or outline of the precordial dulness, and the position of the apex beat, especially in relation to the left border of precordial dulness. The pericardial friction rub is doubtless present in every case of pericarditis in some period of its course. It is practically the sole local sign in plastic pericarditis. It may not be recognized in pericarditis with effusion, although it is probably present in every case at an early stage of the disease, and in cases of recovery after the disappearance of the effusion; it may be present, too, during the stage of effusion. The form of this outline of dulness in pericardial effusion is also characteristic. The pearshaped outline with the base downward; the dulness, even in the early stage of effusion, in the fifth right interspace, close to the sternum, obliterating the resonant angle formed by the lung, heart and liver; the dulness over the sternum extending to or above the second rib, together with the outline of the left border dullness, are easily recognized and are almost pathognomonic. It is also true that a greatly enlarged heart, with all the chambers diluted from myocarditis and a weak diffusible apex beat, may present an outline of dulness which so nearly resembles that of pericarditis with effusion that it may be impossible to differentiate, without puncture, between them.

The location of the apex beat in pericarditis with effusion is characteristic. When it is perceptible it will always be found that the left border of dulness is relatively far removed from it as in no other cardiac disease. In large effusions it is likely to be obscured, and at other times the right ventricle may strike the chest wall in the region of the nipple, or undulatory waves may be seen as the only evidence of the heart beat against the chest wall. However, it matters not how the apex beat or the impulse of some other part of the heart against the chest wall be ascertained, it will be found that the point of contact of the heart against the chest wall is always relatively far removed from the left border of precordial dulness as compared with the relation of the apex beat to the left border dulness in all other conditions. The relatively rapid respiration and dyspnea, the signs of compression of the left lung evinced by the left subscadular dulness and bronchial breathing, the rapid heart action, the the pulsus paradoxus and the asymmetry in size of the pulse of the radials, the irregular type of temperature, the paralysis of the left recurrent laryngeal nerve, the unequal pupils, the disturbed mental state of the patient, and still other phenomena, are signs and symptoms not so characteristic as the three cardinal signs first named, but are important and significant when present. Pericarditis is an easily recognized condition. Frequent careful systematic examination of the precordium should be made in all infectious diseases, and if this is done by the clinician, pericarditis will not escape him.

Circumcision.

Circumcision probably originated with the Jews, while it is not performed very extensively among other races, most writers are of the opinion that it is not out of place and really proper for one to be circumcised. One writer, however, George I. Bluhm in the Pacific Medical Journal is bitterly opposed to it from every standpoint. These are his reasons:

Circumcision from a hygienic standpoint, not necessary. From a preventative standpoint, useless. From a physiologic standpoint, removal of a functionally useful part, mutilation of organ. From a pathologic standpoint, not justified. From a humanitarian standpoint it is cruelty, and punishing a community in advance for a certain benefit that might accure to an individual. It ought to be prohibited by law.

Cardiac Lesions as Observed in the Negro, with Special Reference to Precarditis.

In reference to this subject, Erank A. Jones, in Boston Medical and Surgical Journal, makes the following recapitulations:

(1) Aortic regurgitation in the negro was the most frequent and most dangerous of all valvular lesions; (2) the next most frequent—aortic stenosis; (3) the next, mitral regurgitation; (4) mitral stenosis had not been diagnosed in the cases he reported from the physical signs and symptoms; (5) tuberculosis and syphlis acted both as exciting and predisposing causes in the production of muscular and valvular lesions; (6) syphilitic history in mitral regurgitation was more frequently found than that of rheumatic; (7) the murmur of aortic regurgitation was most frequently musical.

Cause of Alopecia.

After a careful and well-written paper discussing this subject in The Medical Record, Delas L. Parker seems to think it

not unreasonable to conclude that alopecia is caused by an auto-infection in which trichotoxicon is taken up by the blood from the air cells of the lungs, where it has been elaborated during decompositon of organic matter normally present in respired air.

The Diet of Typhoid Fever.

The writer was very forcibly impressed during this summer season of one case of typhoid fever where the patient took scarcely any nourishment, but drank large quantities of water. She lost very little flesh and made a beautiful recovery. Wm. Edgar Darnell, in Medical Summary, emphasizes the fact that there is no phase of typhoid fever of more importance than the diet. It is to be hoped, for the patient's comfort at least. that the day is rapidly passing when one stricken with this malady is ordered milk every two hours with scarcely anything else throughout the entire course of the disease—a period averaging usually from three to six weeks. By this time the patient fairly loathes the sight of milk. Can you blame him? The typhoid diet may be varied very agreeably all through the course of the disease without danger, and I believe in the past we have denied typhoid patients unnecessarily things they might have enjoyed harmlessly. It has been our custom in the wards to feed the patient every three hours. He is allowed during the continuance of the temperature pure, fresh milk, which may be peptonized if necessary, buttermilk, whey, junket, clear soups, or thickened with some farinaceous substance, broths of mutton, beef, clam, or chicken, beef tea, albumen water, orange or lemon ice, ice cream, toast water, tea and coffee very moderately, and plenty of cold drinking water. He may also be allowed the prepared foods, as Granum, Peptonoids, Somatose, Panopepton, Malted Milk, etc. With such a variety the food may be frequently changed and the patient rarely complains. As the fever is declining the diet is gradually increased by adding from day to day arrowroot, cup custards, oatmeal, rice, a soft-boiled or poached egg, tapioca custard, milk puddings, cackers softened in milk, milk toast, apple charlotte, and mashed patatoes.

The Danger of Anthrax from the Manipulation of Horsehair, and its prevention.

This disease is being discussed very fully of late with growing interest, its genesis and prophylaxis. Alexander Scott has a well written article in the British Medical Journal about the above subject, and after careful consideration suggest the following precautions for the preventation of the disease:

1. That all workers should wear overalls.

2. That no one with any cut, sore, or abrasion of the skin should be allowed to work unless it can be absolutely protected from contamination.

3. That all workers should wash themselves frequently, and especially before taking food.

4. That all cases of illness, especially if connected with any swelling or boil, should be immediately intimated to the manager, in order that the disease may be attacked in its earliest stages, and that other workers similarly exposed may be warned of their danger.

5. That the bales should be immediately immersed in water, and that no handling of raw material be permitted, except in the wet state. This will prevent dust, and the risk of contagion then will only be possible through an abrasion of the skin. I have no faith in the use of fans, respirators, or currents of air. The germ must be killed; by these means it is simply shifted. Unlike other dangerous trades this microbe is wafted on the breeze until it settles, and there awaits—it may be for years—a suitable soil in man or beast in which to grow and develop

6. That the hair should be boiled—say for thirty minutes— in order to cleanse it, and soften the agglutinated discharges which may contain the germs, and that afterwards steam should be applied for the same time at a pressure of 0.15 atmosphere. If, however, it be desired to effectually disinfect by boiling, without continuing it so long as to destroy the material, it could be accomplished by using a 2 per cent. solution of potassium permanganate, and afterwards bleaching with a 3 per cent. solution of sulphurous acid.

7. That all dust and residue be carefully burned.

I am of the opinion that these precautions might be used without encountering any material or industrial difficulties, and that they would afford a commplete immunity from the disease.

Diphtheria, and Treatment of Some of its Phases.

The great treatment for diphtheria at this time is antitoxin. A few valuable suggestions are givenb y Wm. R. Robinson in the Colorado Medical Journal in which he says:

1. Have a large white apron with sleeves covering your street suit, removing it as you leave sick room.

2. Thoroughly disinfect the clothes worn by patient.

3. Observe very rigid quarantine.

4. Have moist sheets soaked in 5 per cent. carbolic acid solution hung over door leading to other parts of house.

5. Prevent inhalation of infected air.

6. Prevent eating or drinking infected food.

7. Give close attention at beginning of disease.

8. Observe careful scrutiny of convalescence.

9. Examination of throats of school children should be regularly made.

10. Remove enlarged tonsils where tonsilitis is frequent.

11. Remove adenoids.

12. Secure free passage of air through nose, preventing mouth breathing.

Dry Heat in the Treatment of Disease.

The treatment of disease by hot air is no new thing, the Greeks and Romans had their hot air baths. The Indians of our own country still resort to hot air baths in case of illness, regardless of what the illness may be.

R. W. Crowin in Denver Medical Times, says:

Much judgment should be exercised in giving a patient his first bath. A patient's first experience is accompanied by anxiety, and ofter by a dread of being burned or suffocated, especially if too much heat is applied,or the temperature rapidly elevated.

The temperature employed depends upon the condition of the patient and disease. It may vary from 120 to 140 degrees Fahr. In all cases, the temperatute should be increased gradually. Perspiration is usually sufficiently produced between the temperatures of 160 to 180 degrees, but it is not uncommon to raise heat to 320 degrees.

The length of time the patient should remain in the oven or general bath is usually from 15 to 30 minutes, depending upon circumstances. The local bath may be employed beneficially for much greater period, one hour or more.

Water may be given the patient to drink, which will increase perspiration; and the head, face and neck sponged or covered with damp towels. The patient should be placed in flannel blankets after being removed from the oven, and may have sponge baths and massage, and should be protected until thoroughly cool.

Duration of Life of the Sot.

Chas L. Dana, in Medical Record, says: The average duration for men of the drinking habit in serious cases investigated was about fifteen years—the maximum being over forty years. Among periodical inebriates the average duration was nineteen years. In general, it may be concluded that hard drinking can rarely be carried on for more than twenty years, and it generally brings the victim to grief at about the age of forty. There is a certain massive, taurine type of man in whom the capacity to drink seems almost limitless. These creatures have heavy, strong forms, a large muscular system, powerful digestive organs, strong hearts, and usually good brains in the beginning. They have impetuous, aggressive temperaments and strong social instincts, and they often make themselves felt in the community as effective men, though they possess violence of temper, impulsive judgement, and rather defective moral sentiments. When they get to drinking, they develop into sots. They drink moderately, perhaps in the morning, but keep it up and consume two or three quarts of whiskey daily, going to bed finally in a drunken stupor, bat awakening fresh, well, and hungry in the morning. It takes ten or fifteen years to bring on in these subjects the final dementia or insanity, during which time it may be estimated that they drink about two thousand gallons of whiskey. This is, perhaps, the maximum limit for any man, and they reach it usually between the ages of forty and fifty, if their means admit. These men are not drunk except at the end of the day, and often attend to their affairs for years, Some of these continuous drinkers rarely get seriously or noisily intoxicated. One man forty-two years old, said he had been continuously drunk for two years, but had managed to attend to his business.

Diagnosis of Intestinal Perforation in Typhoid Fever.

It is said by Joseph Stokes in the Medical Record that only within the last few years had it been known that the perforation actually takes place some hours before the appearance of the usual symptoms given for this condition, viz., sudden abdominal pain, collapse, general abdominal tenderness and rigidty, and the peculiar expression of the face. Perhaps the most important of the early symptoms was pain, which was rarely absent. Its onset was usually sudden, and it was generally, though not always, severe. In a large proportion of cases the pain was located in the right ileocæcal region. Another early sympton, and one almost invariably associated with abdominal pain, was rigidity of the abdominal muscles. The occurrence of these two symptoms together in the third

week of typhoid fever was almost pathognomonic. Another symptom which was fast assuming some importance was leucocytosis. This was usually so transient, however, that to be of any value counts would have to be made daily, indeed almost hourly, by experts. Immediately after perforation there was little to be learned from either the pulse or the temperature. Nausea and vomiting were early symptoms in only a small proportion of cases. The object of the paper was to disabuse the medical mind of the notion that intestinal perforation in typhoid fever was characterized by a sudden and overwhelming change in the patient.

Diabetes in Surgery

To the surgeon as well as the physician diabetes mellitus presents many points of deep interest. About half of the diabetes mellitus, writes Robert T. Morris, in the Medical News, that occur as a result of traumatism follow injuries of the head, and almost all of the others seem to follow injuries of the liver, kidney, pancres, stomach or spleen. Cases of traumatic diabetes are apt to be associated with traumatic neuroses of various kinds, and the glycosuria, while transitory in a great many of the cases, may become permanent. In some cases polyuria exist after sugar has disappeared from the urine, and this seemed to support the theory that the liver and kidney were suffering from functional neurosis emanating from a common sympathetic centre and that disturbance of the kidney lasted longer than the disturbance of the liver; but Dr. Bailey has appearently shown that we cannot look to the semilunar ganglia as a centre for the reflex disturbance. The surgeon is sometimes called upon to testify that diabetes has followed a trauma, and it has been discovered on several occasions that the patient was suffering from glycosuria previous to the time of his injury; consequently we have to be on our guard in accident insurance cases, and it is not safe to testify to the character of a so-called traumatic diabetes unless we know the history of the patient in the matter of glycosuria previous to the time of his injury.

Atresia Hymenalis, its Etiology and Treatment.

The congenital artesia of the female sexual apparatus has been in later days a subject of greatest interest and discussion. O. Thienhaus, in an able article in the Journal American Medical Association, emphasizes the following points:

1. The origin of gynetresias in a simple genital tract may be twofold: *a*, caused by inflammatory process, which is true in the majority of cases; *b*, caused by congenital malformation, as shown by Van Tussenbrock, in a case of atresia hymenalis, which however, can find, as above cited, another explanation, and by Landau in a case of atresia cervicalis produced by a mesonephric fibroid. 2. The practitioner must pay attention to every case of birth where he susdects a gonorrheic infection of the maternal genital tract, not only to the eyes of the new born, but also in the same manner to the vulva and vagina; and if he finds an infection of these parts he should treat them carefully with 5 per cent. of protargol solution three times a day, as advised by Siebert, or by other methods. 3. In all infectious diseases during childhood possible inflammation of the genital apparatus must be taken into consideration. 4. The physician must enforce a thorough examination in all cases of molimina menstrulia with absence of menstrual flow. 5. If he finds an atresia somewhere in the genital tract as the underlying cause, he must not cut blindly into the hematocolpos or hematometra, but must direct his method of treatment after the question: Is there hematosalpinx present or not? 6. If the latter is diagnosed laparotomy must be performed first and then the hematometra or hematocolpos opened by the vaginal route.

Criminals and Defectives--How Best to Reduce Their Numbers.

Upon the solution of this problem rests the welfare of home, nation and civilization. At the dawn of the new century the United States finds itself confronted with an alarming increase of crime. How shall we reduce this? What are the best methods? These are the questions that meet us. A good prescription is offered by J. C. McCassey, in The Medical News:

Extension of manual education and industrial schools; improvement in motherhood; stop lease system; extension of reformatory plan; adopt intermediate sentence; improvement of jails; extension of probation system, both for youths and adults, as in Massachusetts; work for prisoners even on short sentences and allowing them a portion of their earnings to be sent to their homes or families. Abolition of spoils system in prison management; higher grade of prison officers; physicians should be wardens of penitentiary and executive officers of reformatories.

The physician, being armed with the chemical laboratory, the X-rays and other modern means of scientific investigation, will naturally become the mentor of the

people, and, as he now protects our shores and municipalities from pestilence and infectious diseases, he will also protect society from crime.

Empyema.

John A. Hartwell, in Medical News, presents the following interesting and valuable summary in regard to empyema in children:

1. Children are especially liable to empyema following pneumonia. Unless promptly relieved by drainage of pleura the prognosis is bad. With such relief the prognosis is good.

2. Pneumonia caused empyema in 50 per cent. of the cases here considered, and such cases were of severe type.

3. Tuberculous family history exerts little influence on empyema.

4. In about one-sixth of the cases the empyema was sacculated.

5. The pneumococcus was found in 50 per cent. of the cases where examination was made; the streptococcus in 33⅓ per cent.; the staphylococcus in 8 per cent.; the tubercle bacillus in 4 per cent., and no bacterium in 16 per cent. The pneumococcus produced the most virulent infection.

6. Chloroform was the anesthetic of preference. Deep narcosis is contra-indicated, owing to the danger of pus being drawn into the other lung from a ruptured bronchus.

7. In adults with general empyema two inches of the seventh and eighth or eighth and ninth ribs in the posterior axillary line should be resected. In children the same length of the seventh rib. Simple incision, with our present knowledge, is rarely advisable.

8. Operation is indicated as soon as diagnosis is made.

9. Irrigation of the abscess cavity with bichloride solution, 1-5,000,or carbolic acid, 1-100 is indicated, unless drainage is perfect and no sepsis is present. In children the solutions may be weaker.

10. The mortality from the empyema proper was 15 per cent. We may hope to reduce it to one-half that number by earlier and more radical treatment.

Experimental Yellow Fever.

In a lengthy and comprehensive article, in American Medicine, concerning yellow fever, Reed, Carroll and Agramonte calls special attention to two matters which they consider of considerable importance in connection with the possible importation and propagation of yellow fever.

First, we believe that the facts herewith presented indicate that the period of incubation of yellow fever occasionally exceeds the quarantine period of 5 days, and that although exceptional, this must not be left out of consideration. Secondly, that our observations emphasize anew the importance of the recognition by the profession of mild and very mild cases of yellow fever. Guiteras says: "I cannot insist too much upon the importance of the diagnosis of the first case of yellow fever in a locality." He adds: "Undoubtedly the cause of the epidemic of yellow fever is to be found in the introduction into a community of cases that are not suspected to be yellow fever." In the light of our investigations, we feel constrained to remark that the failure to detect cases of mild yellow fever, has been, we believe, the most important factor in the development of the theory of the propagation of this disease by fomites.

Epidemic Cerebro-Spinal Meningitis.

Dr. G. Schirmer, in Journal of Medicine and Science, formulates his plan of treating epidemic cerebro-spinal meningitis:

1. Inunctions of one ounce of unguentum Crede daily for three days, and use a further one-third of an ounce at each relapse.

2. Very hot water applications to the spinal column when there is great pain.

3. Antiseptic cleaning of the nasal cavities as soon as the general condition of the patient permits it.

4. Small doses of trional when there is great restlessness.

Lumbar puncture seems to be a valuable diagnostic measure, but of little curative value.

Food for Summer.

Latson, in Heath Culture, says the most frequent cause of discomfort from the heat is probably overfeeding. During the warm season the food should be simple and the meals infrequent. Those who complain most of the heat are really, in the vast majority of cases, suffering from the overstimulation of too much food, of food excessive in variety or of food too highly seasoned. Where too much is taken it can not be digested, and therefore it ferments in the stomach and intestines, forming various abnormal and acrid products. The irritant action of these substances causes the sensation of heat, discomfort and nervous irritability from which so many suffer during the heated term. Imagine a very hot mustard poultice two feet long by one foot wide placed upon the front of the body on a hot day. Imagine, further, that the wearer did not realize the cause of his discomfort. How he would rave about the

heat! He would be infinitely better off than the man who has filled his stomach with a complete meal, generously flavored with salt, pepper, vinegar, sugar, mustard and perhaps Worcestershire sauce, black coffee and wine. Such a meal will, within an hour, form a fermenting mass, unspeakably foul, acrid and irritating, sufficient often to drive the ignorant sufferer to the verge of madness. Consider that such a meal is crammed into a stomach perhaps already half full of the remains of a partially digested breakfast or luncheon. Such a noisome and irritant mass could not be retained for ten minutes in a normal stomach; but the average stomach, weakened by many years of similar abuse, is too weak to eject its load, so the matter is retained, and in time is passed into the intestines. Here the putrefection proceeds rapidly, forming poisons which, as I have often explained in this column, lead to various discomforts and dangers, ranging from headache, dizziness and faintness to fatal seizures of "apoplexy" or "heart failure."

Facial Paralysis.

Careful, intelligent and definite statements should be given as to the prospects of recovery or the duration of this disease. Facial paralysis, more than any other nervous disorder, is noticed and daily seen by laymen, who is ever ready to proclaim the success of failure of the attending physician. J. M. Aiken, in The Medical Herald, says: Uncomplicated peripheral paralysis of the facial nerve will get well of its own accord in three or six months, but may be materially hastened by the application of mortor nerve excitants. All such treatment would be harmful during an acute sensory disorder from middle ear or mastoid inflammation, when heat, counter-irritants and anodynes are indicated. If the knowledge possessed by regularly qualified physicians were practically and legally utilized, nine-tenths of the cases now going to one or more of the modern fads and "being cured" would be quite as successfully treated by the family physician, while his intelligent direction of the patient would place all cases he was not prepared to treat with some co-worker having the necessary facilities for diagnosis and treatment.

Gonococcal Auto-Reinfection of the Urethra.

This disease demands our attention from day to day. There is scarcely a journal but what each issue has an article or an item about gonorrhœa. Fred C. Valentine in New England Medical Monthly submits the following generalizations concerning gonorrhœa:

1. That an apparently fresh outbreak of gonorrhœa is not positive of a new infection;

2. That non-discovery of the focus or foci of infection should not deter the practitioner from renewed efforts;

3. That treatment can be effective only on discovery of the site or sites where gonococci are residual;

4. A tenuous discharge (one that can be drawn in long filaments from the meatus) while generally indicative of prostatic involvement, may evidence a widely dilated minor urethral adnex or a polypus;

5. The preponderating epithelia usually are indicative of the site of disturbance;

6. Curetting the urethra for purposes of examination tends to results that are misleading;

7. The diagnosis by microscopic urinalysis is most frequently confirmed by clinical examination of the patient;

8. That when urine has become macroscopically clear, it by no means indicates the patient's freedom from gonococci;

9. That no rigid instrument can serve for exact diagnosis of urethral coarctations;

10. That for therapeutic purposes, dilators are generally preferable to sounds;

11. That precise diagnosis is obtainable only through the urethroscope;

12. That, however, urethroscopic diagnosis requires completion by microscopy;

13. That for diagnostic purposes, the practitioner is warrented in producing an irritative discharge either by drugs, or by the omission of irrigation after dilatation, or both;

14. That the absence of visible glands in the urethra does not prove that none of them are engorged;

15. That the majority of instances enlarged glands and crypts require local treatment, either by cauterization or electrolysis;

16. That retrostrictural maceration of the mucosa favors aggregation of gonococci;

17. That fissures at the external meatus may harbor gonococci.

How Shall We Deal With Uterine Myomata.

E. E. Montgomery writes interestingly upon this subject in the Journal of the American Medical Association. He mentions the fact that much confidence in the efficiency of different remedies has been expressed at various times. The extract from the thyriod gland seems to be the only one of the new extracts capable of producing beneficial affects. This agent appears to exert a special influence upon the epithelium of the uterine mucous membranes, which promotes the arrest of hemorrhage

and decreases pain. After discussing the subject the writer answers the question of the title of his paper as follows:

1. Small uterine myomata, whch do not give rise to symptoms are subperitoneal or interstitial, and may be permitted to go untreated, but the patient should be kept under observation and any increase in size should indicate operation, as continous growth may result in destruction of the uterus.

2. Small growths which cause hemorrhage are submucous or interstitial, and should be removed through the vagina. They can be made accessible by tints, or by incision through either the anterior or posterior lip.

3. Multiple growths, or small growths, non-accessible by the vagina, which cause symptoms should be removed by abdominal incision. The uterus should be preserved whenever practicable.

4. When the growths are large, or render exterpation of the uterus necessary, the entire removal of the organ, as described in the text, is the simplest and most expeditious procedure.

High Temperature in Pneumonia.

In the case reported by Williams in the Journal American Medical Association, the temperature rose to 107.4 in the rectum on the second day and continued relatively high until the eighth day. The tongue throughout the disease was moist and but moderately coated; the somach behaved well; constipation was constant; the heart action was much accelerated, but not alarming; the physical signs were those of consolidation and fibrinous pleurisy over the whole left lower lobe, and there was slight jundice of the conjunctiva; but on the whole the symptoms were not such as would be alarming aside from the high temperature observed. The urine, however, contained large quantities of albumin and casts, continuing until the twenty-eighth day, but then became normal ana so remained.

Infantile Atrophy.

Heubner (Boston Medical and Surgical Journal) details and criticises the results of previous observers as regards the pathology of the intestines in infantile atrophy. He concludes:

1. In the true atrophy of infants there are a series of cases in which, on careful examination, all grave changes of the intestinal epithelium, intestinal mucous membrane, and of all the rest of the intestinal wall, were absent in all parts of the intestines.

2. The alternations described by some authors as intestinal atrophy can be produced in any normal intestine by simple distension.

3. The so-called spontaneous intestinal atrophy has always been found in distended parts of the intestines; never in contracted.

4. The conclusion must be drawn from two and three that the leisons attributed to atrophy are due to the varying physical conditions of the intestinal wall. Hence the anatomical basis for the conception of a true atrophy of the mucous membrane in the general atrophy of infancy cannot be considered as proven, and the whole teaching founded thereon is therefore untenable.

It is shown, moreover by other clinical facts, that infantile atrophy cannot depend upon so severe anatomical lesions as would occur in a true atrophy of the mucous membrane. Complete and rapid recovery may take place in some severe cases of pure atrophy of many weeks' duration. It is clear that severe anatomical defects in the mucous membrane could not be repaired in so short a time. In the atrophic conditions of infancy the real trouble is a severe disturbance of the intestinal functions. The origin of this functional weakness of the intestinal and glandular epithelium which results in the imperfect utilization of the food is not known. It is clear, however, that it is always the result of previous debilitating influences. Thus, for example, long-continued insufficient nourishment with weakness, or long-continued overnourishment with disease may cause these conditions. It cannot be denied, moreover, that congenital weakness of the intestinal track may be an important factor in the causation of the lighter conditions of this secondary functional incapacity.

Ideals in Physical Training.

In reviewing the achievements of the past century in physical education we cannot help being deeply impressed with the substantial progress that has been made. D. A. Sargent, in Medical News, says of this subject:

In considering the present status of physical training in the United States we find it established in some form or other in 270 colleges and universities—98 are doing organized work, 72 require physical exercise and 24 give credit for it in the course which counts for a diploma. About 300 cities have introduced physical excercises into the public schools, and 100 of them have special teachers. There are about 500 Y. M. C. A. gymnasiums in different parts of the country, with a corps of some 300 physical directors and 80,000 members. The North

American Turnerbund has some gymnasiums and about 200 instructors and some 45,000 members. There are perhaps 100 athletic club gymnasiums of one description or another and a few out-of-door and public city gymnasiums. Then there are many gymnasiums in private houses, churches. hospitals, sanitariums, army and navy depots, police quarters, engine-house, stations, mission houses, industrial schools and many other institutions to the number of several hundred. In addition to this form of physical training there are a great variety of special athletic clubs for boxing, fencing, bowling, boating, canoeing, swimming, bicycling, etc. Then there is golf, tennis, baseball, football, with their ardent devotees and numerous following, together with the more passive forms of exercise such as riding, sailing, driving, etc., which have many admirers.

Infant Feeding.

The points made by Chapin in his discussion of the constitution of milk for infant feeding are in Journal American Medical Association. 1 that the chemical analyses of milk are not the only scientific basis of comparison; 2, that Nature adapts an animal's milk food to its digestive system; 3, that cow's milk and woman's milk are intended for different digestive systems; 4, that as cow's milk forms folid curds and woman's flocculent curds, the curd of cow's milk intended for an infant should be broken up mechanically; 5, that as cereal gruels mechanically break up the curds of cow's milk, and as infants are able to utilize them, their use is rational. He says it is often preferable to make the standard diluent of digestive gruels, as they not only break up the curds but furnish a certain amount of nourishment which is immediately available, taking the place of part of the soluble proteids and also form a satisfactory substitute for milk when it must be withheld for a few feedings. A great variety can be supplied to infants by means of digested gruels at a triffling expense and the tendency is always to get back to milk and not to keep on indefinitely with a diet of carbohydrates as with most infant foods used.

Insanity.

From time immemorial insanity was the favorite plea for the murderer, and the will-breaker, the experts were arrayed against each other, and learned judges solemnly pondered the text-books on mental diseases. The editorial writer in the St. Louis Medical Review fully appreciates the situation of the physician when testifying before judge and jury in a lunacy case, when he tersely says:

Nowhere is uncompromising honesty more essential than in the doctor testifying in a lunacy inquest. The specialist, no matter how much renowned, who would allow his judgment to be swayed by a pecuniary consideration, should be forever disbarred from the society of decent physicians. Common sense should guide the doctor, although he need not neglect his library. He may listen to the hypothetical question, but he should also think of the particular case. No hypothetical question is, nor ever will be, full and exact. It is a relic of legal pedantry.

If he will shun glittering, polysyllabic generalities, and speak the truth simply and honestly, the fiercest cross-examination cannot shake his testimony.

Injuries at and Near the Elbow Joint.

The fractures that occur in the region of the elbow joint are (H. Levift, Ausralian Medical Gazette): (1) fracture of the humerus first above the epiphysis; (2) separation of the lower epiphysis; (3) fracture of the projecting point of the internal condyle; (4) the T shaped fracture, which is the separation of each condyle from the shaft and from one another; (5) separation of either condyle. The first three are external to the joint, the latter two involve the synovial membrane. (6) fracture of the olecranon; (7) fracture of the coronoid process of the ulna—which is said to be one of the rarest accidents in surgery; (8) fracture of the neck of the radius.

The dislocations that are said to occur are: (1) the dislocation of both bones backwards, with or without fracture of the coronoid process, which is one of the commonest form; (2) dislocation forwards, which is said to be extremely rare; (3) lateral displacement to either side; then there are reported instances of dislocation of the ulna alone backwards, dislolation of the ulna backwards and the radius forwards, and the dislocation of the radius and ulna complicated with the fracture of the olecranon coronoid process, either of the condyle or of the head of the radius; (4) dislocation of the head of the radius, which may be forwards, backwards, or outwards, the first position being the most common. Certain nerves may be injured at or near the elbow-joint, viz: the musculo-spiral, the posterior interosseous, and the ulnar.

Infantile Bronchitis.

O'Donovan, in The Journal of the American Medical Association describes the treatment of acute broochitis in children, which

is imperative as soon as the case is diagnosed. In the milder cases, regulation of the diet, mild laxtives, comfortable warmth of surface, with good ventilation are all that is required. Babies take medicine badly and are best treated by local applications and inhalations, such as the oiled silk jacket and stimulating liniments to produce mild irritation of the skin, steam inhalation, etc. Of expectorants he would use very little; the compound syrup of hypophosphites is best in young children. Older children take medicines better. They should contain muriate of ammonia in proportion to the age of the child. Hypnotics should be given with judgment; sodium bromid will sometimes be all that is necessary. In prolonged cases where the heart-action is rapid and the organ becomes fatigued, strychnin hypodermically is of great service. In every case the child should not be allowed full liberty until the disease is completely cured and should remain indoors until the bronchial catarrh has entirely disappeared. The cure may be hastened by judicious feeding, stimulants, frictions of the chest, and the use of cod liver oil, iron and arsenic if the child is anemic.

Local Treatment of Female Diseases, and Its Abuses.

L. Beahan, in The Medical Record, believes that the most dangerous procedures are perhaps intra-uterine examinations, operations, and applications. The most dangerous instruments used in treating these diseases are dilator, sound, and curette. The sound should never be used. The curette is useful when the uterus has failed to expel part or the whole of the products of conception, or when later the uterus does not contract because of fungous granulations of the membrane of uterine cavity. The curette should be used with great circumspection and after a careful eliminating diagnosis. Its use should rank with major operations and similar careful preparation should be made for its performance. Large, smooth, loop curettes should be employed to remove placental debris. The employment of pessaries has been much abused. Electricity as usually applied seems futile. The principles of practice must recognize the causes involved in producing female diseases, such as constipation, the results of abnormal confinements, of repairs not made in season, and of sexual infections. Calomel and salines indirectly lessen pelvic engorgement. Hot-water douches in the recumbent posture, followed by soothing alkaline or stimulating astringent solutions of moderate strength, are useful, except in tubal and ovarian diseases, but if pain occurs when they are administered it is proof of harmfulness. Local treatments will seldom be required. The use of tampons of cotton or wool with glycerin are valuable, but should be used only when the patient is confined in bed. Great care should be used in this procedure. A torn cervix should be repaired by the Emmet method. Perineal laceration should be repaired by the American or Emmet method of elevating the perineum and anchoring well up. The close study of many female diseases will limit the range of usefulness of "treatments," but enlarge the sphere of surgical relief and improve the care of remote and general disturbances.

Lacerated cervix.

J. B. Deaver, in the Journal of the American Medical Associataion, says:

The treatment of a lacerated cervix, calls for as great a display of good judgement and skill as does any of the major operations on the pelvic vicera. Here again we have the same possibilities and risks to contend with as in the operation of dilatation and curettage, viz., the lighting up of a salpingitis, of a peritonitis or some per-uterine pelvic inflammatory process. In the absence of any contradictations from the pelvic viscra, tubes of ovaries, and with the condition of the laceration of the cervix warranting interference, the operation, being done under strict aseptic precautions, is generally under the circumstances not un attended by danger, if we are not carefu to leave sufficient room in stitching up the laceration to permit free drainage of the uterine canal, and I may add that this is one of the most fruitful sources of subsequent salpingeal disease.

The Importance of an Early Recognition of Tuberculosis in Its Relation to Treatment.

It is a well established fact that the diagnosis of incipient tuberculosis is often withheld from the patient, unilt the disease has advanced to such an extent as to make it incurable. The results obtained at sanataria have demonstrated not only that the disease is curable, but that it is curable in direct porpotion to the stage at which the treatment is appplied.

A diagnosis (E. L. Trudean, The Medical News) of truly incipient tuberculosis would no doubt be oftener made if its all-important bearing on the treatment was more fully appreciated. My experience in going over the histories each year of many hundreds of consumptives would lead me to believe that the grave responsibility which rest on the physician of detecting the disease in its very earliest stages and

the significance of doing so in relation to successful treatment are not generally realized. In the great majority of cases valuable time (many months and even years) is allowed to elapse since the first symptoms of ill health appeared before the patient is told the nature of his disease and urged to adopt radical measures for its arrest and cure. Too often he is not told that he has tuberculosis until he can no longer be deceived. His disease is labled grip, pleurisy, bronchitis, or malaria, he is informed that the blood came from his throat; until persistence of the symptoms, rapid emaciation, constant cough, hectic fever and sweats, make the true nature of his maladay but too appearent, when he is advised to give up his ocupation and make a change of climate or seek admission to a sanitarium, only to find that the proposed change is of little avail, or that he has applied too late and cannot be taken at an institution.

Infantile Colic.

Dr. H. Illoway discusses this subject in Pediatrics. The treatment he says divides itself into the immediate relief of pain and the removal of the cause. He advises irrigation of the bowels with hot water and the external application of heat. He is opposed to the use of opiates for fear of the habit. He is a great believer in the use of milk of assafetida freshly prepared. The dose is one-third to one-half teaspoonful followed by a second dose in 15 or 20 minutes. It quickly removes flatus.

The Limitation of Drug Therapy.

Medicine is justly styled the healing art, and, therefore, if we would become healers of the sick, as well as diagnosticians, we must endeavor to make a practical application in therapeutics, of the truths taught us by pathology, bacteriology, physiological chemistry, &c. We have passed beyond the time when practitioners of medicine are mere "pill pedlers." The time has come when the prescriptions are limited and medicines rare. The time has come when water, sunshine and good air are recognized as valuable therapeutic agents, in fact the most valuable. To a patient in ill health he is told to seek a climate that will be condusive to the restoration of his health, instead of loading him down with prescriptions. Robt. H. Babcock, concluding an able article along this line, in the N. Y. Medical Journal, says:

We Americans are too prone to regard the state of the weather, as if rain, wind, and sunshine could be hurtful to him who is properly prepared to encounter them. Let us not as an association, however, devote our energies too exclusively to the climatology of consumption, ignoring the other natural means of cure in the treatment of diseased conditions in general. Let us broadly preach the gospel that good health means the intelligent daily use of those agencies with which bountiful Nature has supplied us, and which, alas! but too few physicians, as well as patients, know how to employ intelligently. By instructing the people how to make proper use of fresh air, exercise, healthful food, and water we shall not only furnish them with what is better than prescriptions, but we shall guard them against many of those ills to which they now succumb, and thereby rid ourselves of the opprobium of being mere "medicine men."

The Medical Expert Witness.

An expert witness is a person who possesses peculiar skill and knowledge upon the subject matter on which he is called to testify. It is said that the lawyer and physician are themost unsatisfactory witnesses that go upon the stand. The Texas Medical Gazette nas a good article on this subject by W. R. Butler and concerning physicians as expert witness he says:

1. A physician should refuse to testify as an expert unless he is conscious that he is really qualified as an expert.

2. After accepting the responsibility, his first duty should be to make a diligent examination and preparation of his testimony, less it is upon a subject with which he is familiar and which he is satisfied he has already exhausted, by reading the best authorities that he can find, and by careful reflections upon particular questions as to which his opinion will be asked.

3. Where he is to make an examination of facts, such as a post mortem examination of a body, a chemical analysis or an examination of an alleged insane person, he should insist upon having plenty of time and full opportunity for doing his work thoroughly. He should take particular pains to make his examination open and fair, and, if possible, should invite opposing experts to co-operate with him.

4. He should be honest with his client before the trial in advising him and giving him opinions and upon the trial should preserve an absoutely impartial attitude, concealing nothing, perverting nothing and exaggerating nothing.

5. On the preliminary examination as to his qualifications as a witness, he should be frank and open in answering questions. He should state fully the extent of his personal experience and of his reading upon the subject, without shrinking from the re-

sponsibility, yet without self glorification.

6. He should be simple, plain and clear in his statement of scientific facts and principles, avoiding the use of technical language and trying to put his ideas in such form that they will be grasped and comprehended by men of ordinary education and intelligence.

7. He should avoid stating any conclusions or principles of which he is not certain, but having an assurance that he is right, he should be firm and positive. He should admit the limitation of his knowledge and ability. Where a question is asked which he cannot answer, he should not hesitate to say so. But should refuse to be lead outside the subject of inquiry, and should confine his testimony to those scientific questions which are really involved in the case.

8. And finally he should always bear in mind that at the close of his testimony, an opportunity is usually given him to explain anything which he may be conscious of having said, which requires explanation. And partial statements which need qualifications to make them a truth. This is the physician's opportunity to set himself right with the court or jury.

Massage in Constipation.

The results of massage properly applied in cases of constipation, says W. R. C. Tolson, in Health Culture, are:

1. Stimulation of the pneumogastric ganglion ("solar plexus"), thereby accelerating the peristaltic movements.

2. Relief of portal congestion, which is always present in constipation.

3. Breaking up old, dried, impacted deposits of fecal matter retained in the folds of the colon.

4. Development of abdnominal muscles and relief of the prolapse of the stomach, intestines and other organs, which is frequently present.

5. Mechanically aiding in the ejectment of the fecal matter.

Masturbation Neuroses.

Of late there has been a growing tendency to disregard the effects that masturbation exerts upon the nervous system of individuals in general, without sufficient regard for those who can ill afford such exertions or such exceses. WilliamC. Krauss, in the Medical News, warns against giving a favorable prognosis in cases of functional nervous disease with an underlying history of masturbation coupled with a neurotic family history. Cases giving no history of masturbation, which fail to respond to treatment after a sufficient interval, should be most rigidly interrogated, and in many cases the suspicion of masturbation will be verified. It is almost useless to try any form of treatment or to expect to obtain any definite results in the functional neuroses if this habit is not discovered and corrected. If, then, this habit is so widespred among the young; if it tends in suitable cases to undermine the physical and physical forces; if it renders its devotees almost impregnable to rational scientific treatment, is it not a practice which should be discouraged rather than encouraged, defeated rather than surfeited? My own opinion may differ from others, but from my experience I would rather treat any other form of nervous disease than a case of masturbational neurosis.

The Medico-Legal Expert.

John D. McGill, in the Medical Record, says that the successful medico-legal expert must not only be erudite, but must possess certain physical and psychological qualities. The distinction was drawn between opinion evidence and true expert evidence. The former was apt to be founded on impulse or prejudice. The competency of the expert witness must be decided within the discretion of the Court, and could not be left to the jury. A general practitioner might testify upon any question of medical science, but if one qualified as a specialist he could only give evidence connected with that special department. The consulting physician must base his opinion upon what he himself has discovered in the case, and not upon the history and other facts furnished him by the attending physician or the nurse. While the subjective symptomatology should be given due weight, the expert opinion should be based chiefly upon the objective symptoms. It was well to remember that if a true subjective symptomatology had existed for a considerable length of time it would usually lead to the development of a more or less distinct objective symptomatology.

Movable Kidney.

John B. Deaver, Philadelphia Medical Journal says:

To arrive at a correct diagnosis between a movable kidney and a post cecal appendicitis,, the following points must be duly weighed. Movable kidney it most commonly met with in nervous women who have gastro-intestinal disturbances. The attacks of pain are associated with nausea, vomiting, fever and chills. The urinary functions are disturbed as evidenced by frequent urination, which is apt to be painful and the urine is large in amount. The urine may contain blood and even pus; ex-

cess of uric acid or oxalates are of common occurrence. From the history of the case can be learned the frequency of the attacks of pain, the nature of the pain and the part of the abdomen to which it is referred and whether it is fixed or migratory; whether or not it occurred after the ingestion of a heavy meal, after exposure to cold, or to fatigue, or after unusual movement, or from position or indirect violence. The tenderness of a movable kidney is out of proportion to the degree of muscular rigidity and extends over a larger area than in a case of appendicitis. The above symptoms with the physical signs of a movable kidney make a plain case.

In the case of appendicitis, the three cardinal symptoms are: pain at first general or referred to the ensiform cartilage or around the navel, the later becoming localized to the region of the appendix; tenderness, most marked in the immediate neighborhood of the appendix; and rigidity of the lower portion of the right rectus muscle or the flat muscles of the abdomen overlying the appendix.

Floating kidney with twisted ureter may present symptoms very similar to an attack of post cecal appendicitis. The pain, however, radiates in the line of the ureter and is not increased by pressure to any marked degree. This condition, combined with a history of a movable tumor corresponding to the site of the kidney, the presence of blood in the urine, and changes in the amount of urine, and the absence of the cardinal symptoms of appendicitis will clear up the diagnosis.

Needed Reforms in the Management of Youthful and Insane Criminals.

There is no doubt that the press publication of details of murder is itself a great source of crime, by suggestion. William Glossell Somerville, writing about this matter in The Medical Record, wishes to emphasize the words of Arthur MacDonald in his work on "Criminology":

1. It is detrimental financially, as well as socially and morally, to release prisoners where there is a probability of their returning to crime; for in this case, the convict is less expensive than the ex-convict.

2. The determinate sentence permits many prisoners to be released, who are morally certain to return to crime. The indeterminate sentence is the best method of affording the prisoner an opportunity to reform, without exposing society to unnecessary dangers.

3. The ground for the imprisonment of the criminal is, first of all, *because he is dangerous to society*. This principle avoids the uncertainty that may rest upon the decision as to the degree of freedom; for upon the last principle some of the most brutal crimes would receive a light punishment.

Whatever the remedy of crime, the cause must be studied first; and let us as physicians put our shoulders to the wheel, and by virtue of our knowledge of the laws of heredity, and by virtue of our studies of the physical and physiological state of the criminal, and by virtue of our knowledge of the degrees of responsibility, obtain just and scientific laws for the management and betterment of these unfortunate people. Let us study the causes and the prevention of crime in a physiological manner, that the destiny of future generations may be changed.

Nasal Sprays.

The utility of nasal sprays for their cleansing, stimulating and soothing effects are first noticed. Their abuses, as given by Roy in the Journal American Medical Association, consists in their too general employment, encouragement of the spray habit and the excessive force with which they are sometimes used. He thinks it is almost criminal to employ a cocain spray in the nose, especially in chronic cases.

The Nursing Bottle.

It is a very important matter that the baby nursing bottle should be kept clean, particularly in hot weather. This matter should be brought to the mothers attention. A bottle with an opening in the lower end is the best bottle to use, and the easiest cleaned. By so doing, the baby will be more contented, less liable to becoming ill and will thrive better.

Œdematous Laryngitis.

J. S. Gibb (in the Medical Record) makes the following division of cases: 1. Those in which there in no true inflammatory condition, but simply a transudation of serum into the submucous tissues. These cases are seen in affections of the kidneys, liver, and heart. 2. Acute cattarrhal cases seen in a mild degree in all forms of acute catarrhal laryngitis. These are transient and pass away with the exciting cause. 3. Secondary septic processes complicating the zymotic disease. Here we may have a temporary oedema or a prolonged condition leading to the abscess formation. 4. Cases in which the infection occurs immediately from some source in the pharynx or larynx. These are sometimes called acute infectious oedema. The history of these is essentially one of sepsis. The initial influenzal or catarrhal attack may not be severe. The

local inflammatory condition and accompanying dyspoea are rapidly followed by pulmonary and general infection and sepsis. The majority perhaps of the cases as observed in recent years are due to influenza.

Observations on Milk Coagulation and Digestion.

Franklin W. White (Boston Medical and Surgical Journal), after making experiments in test tubes and in animals with gastric fistulæ on the coagulation and digestion of milk diluted with decoctions of cereals, lime water and albumin water, arrives at the following conclusions:

1. Dilution of milk with cereal decoctions of proper strength renders the casein curd much more fine, soft and digestible than simple dilution with water. There is no difference in the action of various cereals, such as barley, oats, rice or wheat.

2. The above property is due mainly, if not wholly, to the starch in solution. The most desirable amount of starch in the milk mixture for practical use is approximately three-fourths of 1 per cent.

3. Diastase, by converting the starch to dextrine and maltose, promptly lessens and removes the action of cereal waters upon casein. Its addition is, therefore, not a practicable measure when action upon the curd is desired.

4. Albumin water has no practical value as a diluent of milk.

5. Lime water added to milk has no more effect than water upon the character of the curd produced in the animal stomach.

On the Advancement of Surgical Pediatrics.

The diseases incident to children are numerous and hard to define. Few books have been written in any country comprehending all of them. A very instructive article appears in the Journal American Medical Association by Samuel W. Kelley in which he points out the salient points indicative of progress, or the lack of it. He says in colleges insufficient attention is paid to the surgical diseases in children.

In 1896, in an address as president of the Ohio State Pediatric Society, I gave the replies I had received to inquiries directed to the various medical colleges of the United States and Canada, upon the point whether surgical as well as medical diseases of children were taught in the regular course. Sixty-three colleges replied upon this subject. Thirty-seven of them said that the midical side only was taught and twenty-six taught surgical as well as medical pediatrics. When I asked the question, "Does the teacher individually consider that pediatrics includes the surgical as well as the medical diseases of children," I was answered affirmatively forty times, negatively, thirteen, while the remainder either left the question unanswered or answered indefinitely.

In the medical journals and in the medical societies one finds evidence that too little attention is paid to these surgical subjects. Examine your journals and the program of any medical society, even a pediatric society, and see what a small percentage of papers is on surgical topics in pediatrics. Some of those which should be found in the pediatric appear in the transactions of other specialties.

There is still in the minds of the profession, as of the people, a degree of misapprehension as to the natural and proper scope of pediatrics. There are many, both in and out of the profession, who look upon the child's doctor as a kind of a male nursemaid, who limits his practice to mixing milk and inspecting diapers. Very important things to be done are these, but scarcely the only work of a pediatrist!

There should, if necessary, be children's surgeons as well as children's physicians; or of, as Holmes says, one "objects to cutting up surgery into litile pieces," it should at least be required that the surgeon extend his knowledge to diseases of children.

As to whether one man can practice, successfully, both medical and surgical pediatrics, is a question somewhat aside from our present theme. In my opinion the answer must depend on the circumstances and the man.

Observations Upon General Paralysis.

Paralysis is defined as a disease marked by progressive degeneration of all the bodily and mental functions, commencing first with those most highly developed and recently acquired, and ending with complete wreckage of mind and body. Lewis Bruce presents a careful article upon this subject, in which he says!

General paralysis is a disease directly due to poisoning by the toxins of bacteria whose point of attack is through the gastric and intestinal mucous membrane.

The poisoning is probable a mixed poisoning, but the bacillus coli is apparently one of the noxious organisms.

The result of treatment with serum taken from a case of general paralysis in a condition of remission and injected subcutaneously into an early progressive case points strongly to the fact that some form of serum treatment is the proper treatment for this as yet incurable disease.

Post-Operative Hemorrhage.

Hemorrhage in any form is always indicative of trouble. There is no condition more horriable than to realize that a patient upon whom an abdominal operation has been performed is bleeding dangerously. There is no condition in which quick surgeory is more esential. A. H. Cordier in a paper in the Journal American Medical Association, gives these conclusions in regard to this subject:

1. In diagnosticating post-operative hemorrhage the operative history will aid much.

2. The symptoms of shock and those of hemorrhage are very similar.

3. In suspected cases the cutting of a single stitch in the incision will tell.

4. The surgery mus be quick and decisive in these cases.

5. In cases in which bleeding is expected the tube should be used.

6. Large quantities of deci-normal saline solution will save many patients. This should be used both per rectum and by injection into the veins.

7. Strychnin, belladonna, etc., will not control bleeding from a uterine or ovarian artery any better than from any other artery.

8. The surgeon should do what his surgical conscience tells him is right. Late researches in hematology make it appear that an internal concealed hemorrhage may be demonstratrd by a careful blood-count. This, it is stated. will show a decrease in the red cells and an increase in the white.

Very similar symptoms accompany shock from various causes, such as internal hernia, etc., none of which produce a change in the red cells. If an operation was performed for the relief of an inflammatory process, this test would lose its value in part, as there would exist at the time of operating a leucocytosis. Saline infusions apparently increase the white cells at first.

The Present Status of the Carcinoma Question.

Propositions.—1. The most notable contributions to the present status of the carcinoma question, (N. Senn, in Medical Record) are to be found in the investigations which have thrown new light on the origin, growth, segmentation, and manner of local and general dissemination of the carcinoma cell.

2. Carcinoma is a tumor resulting from an atypical proliferation of epithelial cells from a matrix of embryonic cells of congenital or post-natal origin.

3. The law of the legitimate succession of cells holds true in the origin and growth of tumors, both benign and malignant, as well as in the production of normal and inflammatory tissue.

4. As carcinoma always originates from epithelial cells, primary carcinoma in mesoblastic tissue is impossible from a histogenic standpoint, unless a matrix of embryonic epithelial cells has become displaced during the development of the embryo, or embryonic epithelial cells have become buried in mesoblastic tissues after birth, by injury or disease.

5. The histology and histogenesis of carcinoma speak against the parasitic origin of this disease.

6. The stroma of carcinoma consists of pre-existing connecting tissue fibers and their descendants.

7. Carcinoma cells usually multiply by irregular, atypical karyokinesis, and this pathological segmentation is an important indication of malignancy, and as such is of considerable diagnostic value.

8. The progressive extension of a tumor to adjacent tissues and organs, regardless of their anatomical structure, is a strong proof of its carcinomatous character.

9. Regional metastasis in carcinoma takes place exclusively through the lymphatic channels, and the pre-existing lymphatic structures take no active part in the origin and growth of the secondary tumors.

10. General dissemination of carcinoma usually takes place by direct implication of veins in the primary or secondary tumors. Carcinoma cells reach the venous circulation through the formation of an intravenous tumor thrombus, through carcinomatous endophlebitis, or, finally, through perforation of the vein wall by isolated carcinoma cells. Retrograde intravenous extension of carcinoma is due to the transportation against the venous current of minute emboli of carcinoma cells surrounded by a mantle of blood corpuacles which move, step by step, upon the intima. Retrograde extension through the lymphatics may take place in the same manner, but there is very little doubt that it is more frequently the result of carcinomatous endolymphanitis.

11. The increase of carcinoma seemingly shown by some recent statistics is more apparent than real.

12. Heredity is a generally recognized potent predisposing cause of carcinoma.

13. As a rule, carcinoma occurs in persons of advanced age, but occasionally is met with in persons less than twenty-five years of age, and in the latter case the disease is characterized clinically by its great malignancy.

14. Carcinoma seldom follows a single injury, but develops more frequently in

consequence of repeated injuries or prolonged continuous irritation.

15. Among the predisposing causes of carcinoma must be enumerated racial, climatic, and topographical influences.

16. Chronic inflammatory products, cicatrices, and benign epithelial tumors produce local conditions favorable to the development of carcinoma.

17. The positive results of implantation and inoculation experiments have so far failed in establishing beyond all doubt, upon a bacteriological basis, the parasitic theory of carcinoma.

18. A careful study of the experimental researches and bacteriological and histological investigations concerning the etiology of carcinoma does not at the present time warrent us to claim for this disease a parasitic origin.

19. The experience of centuries and the internal use of innumerable remedies have demonstrated that so far carcinoma has not been materially influenced for the better by this method of treatment.

20. Direct medication of carcinomatous tissue by parenchymatous injections has no influence in retarding or arresting its growth, while the injection of sclerogenic substances into the connective tissue around the border of the tumor appears to restrain the local extension of the disease by impairing the blood supply to the parenchyma of the tumor.

21. Local applications of any kind in the treatment of ulcerating carcinoma must be considered at best only in the light of palliative measures.

22. The actual cautery and chemical caustics have only a limited field of usefulness in the treatment of open inoperable carcinoma. They should never be employed in the treatment of closed carcinoma as a substitute for the knife.

53. The treatment of carcinoma by different sera has, without any exceptions, yielded only negative results.

24. The early and radical operative treatment of carcinoma offers the only prospect for permanently eliminating the disease.

25. The permanency of the results of the operative treatment of carcinoma cannot be determined in less than ten years after the operation.

26. A radical operation for carcinoma should never be attempted unless the local conditions are general health of the patient are such as to promise an equivalent of the immdeiate and remote risks to life and comfort involved in the operation.

27. Taking it for granted that carcinoma is the product of an erratic, planless cell-growth outside of the range of the physiological influences which preside over and regulate normal growth and tissue repair, it appears logical in the search for curative agencies to make experiments and observations with the view of finding a remedy which would destroy the tumor by causing an early and speedy degeneration of its parenchyma, or which would possess the property of converting embryonic into mature epithelial cells, thus converting a carcinoma into a benign epithelioma.

Porto Rico—Its Climate and Its Diseases.

After giving the history and a general account of the island and its sanitary conditions, Alden, in The Journal of the American Medical Association, notices the various diseases which occur there. Tropical anemia gives the highest death-rate and seems to be due to the ankylostomum quodenate, as shown by Ashford. Intestinal diseases are common; malaria of the milder type is frequent; yellow fever has been occasional, but not epidemic and is not a serious disease in this locality. Malta fever he thinks is responsible for many cases of irregular fever that often occur and is probably endemic in the island. Tuberculosis furnishes nearly 7 per cent. of the total deaths, with very little annual variation. Tetanus is frequent and fatal. Venereal disease is very common, and a very large proportion of the lower classes are said to be subjected to syphilis. Smallpox has been largely vaccinated out of existence since the American occupation. Cerebrospinal meningitis is a comparatively frequent condition, responsible for a considerable mortality. There are about 100 cases of leprosy, though elephantiasis, which is quite common, has often been mistaken for it. Sanitary conditions, etc., were in a very deplorable state when the island was taken possession of by the United States, but there is improvement already manifested.

The Present Aspect of the Antitoxin Treatment of Diphtheria.

The verdict of the statistical inquiries of the antitoxin treatment of diphtheria of today shows but little change from the collection of the cases made when it was first used. After a study and comparism of all the reports up to the present time. J. Dutton Steele in the Therapentic Gazette has been led to the following conclusions:

1. Under the use of antitoxin the death-rate has been reduced in round figures to about 16 per cent against a former death-rate of from 65 to 25 per cent. In favorable circumstances the mortality is 8 per cent or lower.

2. The death-rate varies greatly accord-

ing to the promptness with which the remedy is given. It falls to 3 or 5 per cent in cases injected upon the first day, and increases rapidly until it reaches 35 or 40 per cent in cases in which injection has not been made before the fourth day or after.

3. Results in hospital practice are much less satisfactory than those in private practice. The reason for this is probably that in the former case the patients are seen and injected earlier, probably come from better hygienic surroundings, and show correspondingly greater resistence.

Relation Between Syphilis, Rickets and Enlargment of the Spleen.

West, Pediatrics, sum up the relation between these diseases as follows:

1. Syphilis is occasionally, and rickets frequently, associated with splenic anemia.

2. In neither case is the association constant.

3. Neither of them are the sole cause, and are probably not the cause at all, except, perhaps, indirectly by means of the ill health to which either leads.

He suggests three possible alternatives as to the relation which exists between the anemia and the splenic enlargement:

1. The enlarged spleen may be the cause of the anemia.

2. The anemia may be the cause of the enlarged spleen.

3. Both the anemia and the splenic enlargement may be the joint results of some common cause.

Responsibilities in the Treatment of Fractures.

The one great purpose in view in treating fractures is to get "a good result." A great many instances are on record where the physician has been severely criticised and censured and even denounced by patients and friends for results which did not meet their approval. Often times suit for damages is instituted. Orlando S. Ritch says, in The Medical Times, our responsibility is two-fold. The treatment must be upon sound surgical principles. The examination must not only consist of the immediate history of the case, but of the history of the patient as to rheumatic diathesis, mercurial medication, syphilis, constitutional dyscrasia, rickets, and all conditions bearing upon deficient osseous development. It is equally expedient that the patient should freely divulge all physical secrets to the doctor; then, if the case be treated scientifically and unfavorable results are produced, we can and should be professionally and honestly supported, whether we meet with abuse or the case pass into other hands. Let us bear in mind that most of our patients come to us second-hand, and from time to time some of our patients pass to other doctors. So while there is a kind of reciprocity on the part of the patient toward the doctor, let us start the new century with a magnanimous, fraternal spirit, helping the weak, supporting the honest (though unfortunate) and let our acts demonstrate our faith that when we are up we will help those who are down, and, when we are down, those upon the wave of fortune will extend the loyal hand, and the practice of medicine will grow brighter day by day.

Spastic Illeus.

Edward Quintard says in the Philadelphia Medical Journal that spastic illeus occurs:

1. In the course of a neurasthenia or hysteria.

2. Reflexly, as is seen at times after operations, or when foreign bodies irritate the intestinal canal—the spasm in this case taking place not only at the point of irritation, but involving other portions of the tract as well.

3. From irritating substances and poisons in the intestinal canal, such as toxines, ptomaines, leukomaines, or when there is general tissue poisoning from such products.

4. From peritoneal irritation (not necessarily septic.

5. Diseases of the sympathetic ganglia.

6. As a distinct neurosis.

Reindeer Tendon as Suture Material.

Greife, in Journal American Medical Association says:

The Russian surgeons are using reindeer tendon more and more extensively as time is confirming Sneguireff's assertions that it is the ideal suture material. It has been used in 450 laparotomies and innumerable minor operations with the most satisfactory results. It is comparatively sterile from the start, no germs have ever been discovered below the surface, and it takes up the disinfecting fluids much more readily than catgut. Tests have shown that when the tendon is thoroughly imbued with a stain, only one-third of the catgut in the same fluid show traces of the stain. The method of sterilization preferred in the Moscow clinics is for two days in ether, one month in juniper oil, ether two days, alcohol two to seven days, in aqueous 1 to 2000 solution of sublimate two days, and in conclusion, the tendons are kept in alcohol to which 30 per cent. water is added to render the tendons flexible.

Special Education for Defective Children.

Every child has a right to an education. Public education is the business of the State. One great trouble that is pointed out by Clarence E. Meleney, in The Philadelphia Medical Journal, is the unwillingness of the parents to admit that their children are defective, or to permit them to be segregated in special classes. Thus through ignorance or sentimentality the children are deprived of an education that might fit them for useful living, and are allowed to grow up as useless beings to be a greater humiliation to their families in later life, when it will be too late to cover up the shame and possible disgrace:

A complete census and classification of defective children will show two main classes: 1st, those incapable of education; for such special institutions are necessary; 2nd, those who may be educated. The latter class includes: (1) the blind, for whom an institution is the best home; (2) the low grade of feeble-minded, also needing special schools; (3) the deaf and the higher grade of feeble-minded, who could live with their parents and be taught in special classes near home; (4) the highest grade of weak children, who could be taught in special classes by the public school teacher in the regular day schools; (5) there is still another class known to the tacher as dullards; these, when classed with the normal childreen, usually fair poorly, often fail of promotion, and leave school as soon as the law allows. This class may be backward in a particular subject or may be slow or generally dull in all studies. In many cases the dullness is due to causes that might be removed by scientific treatment, or by special sense training, or by the use of special means or methods of training. Provision should be made for the expert examination of all such cases, an exact diagnosis of the defect or ailment, and an appropriate treatment. There are two main reasons why such differentiation should be made, and why special schools and classes should be established. First, the interests of the unfortunate pupils themselves; second, the interests of the normal children, and of the teachers, whose entire time is required for the instruction of larger classes of average children entrusted to their care. The improved results in the regular classes, to be accomplished after the elimination of defective children, would more than pay the cost of rooms, appliances and teachers of the latter class. Says one authority who has spent many years in trying to solve this problem: "It means success and victory all along educational lines, if untrammeled by defectives; but defeat which will lead to tedious and endless readjustments, if teachers are forced to continue the impossible task of dragging normal and abnormal up to a common standard."

The Surgeon of To-Day.

There is a marked difference between the surgeon of to-day and the surgeon of twenty years ago. R. W. Garrett, in The Medical Dial, says: During the nineteenth century the surgeon as an operator has passed through a rapid metamorphosis. The operator of the olden time certainly possessed many qualities which are now falling into abeyance. The success of his craft depended largely upon his daring, upon the alertness of his eye, the steadiness of his nerve, and the rapidity of his movements. He stepded into the arena of the operating theatre as a matador strike into the ring. Around him was a gapping audience, and before him was a conscious victim, terror-stricken and palsied with expectation. The knite must needs move on its way swiftly but steadily, undeterred by struggle or bursts of hemorrhage, the blade must needs pass without faltering or hesitancy. It is little wonder if the older surgeon became rough and stern, if his sense of feeling became chilled and if the sympathetic side of his nature suffered some suppression.

Within the compass of thirty years the whole state of affairs has changed. Consideration for the patient and for the patient's sensibilities has become a matter of the first moment, and the operator has learned that his work is best done if done with gentleness and tact, and that haste and blustere, coarseness and coarse handling, are out of place around the operating table. Success is no longer to be measured by the number of minutes occupied in the amputation of a limb, but by the state of the patient many days after the measure has been completed. The triumph of the older surgeon was immediate and often scarcely beyond the arena of the theatre; to-day the surgeon's triumph is seen in the surgical wards or convalescent home.

The Treatment of Rectal Fistula.

There has always been various methods of treating rectal fistula. One likes the knife, another will use a ligature, which is very simple, painless and when properly used very satisfactory as to permanent relief. J. Ramson Pennington usually employs the incision method which is very clearly given in The Medical Standard as follows:

As a rule, I use a general anesthetic. In many cases, however, I employ and prefer a local to a general anesthetic, not only in

the treatment of fistulæ, but in the hemorrhoids, abscesses and many other rectal ailments. The manner of making the incision is all-important and is governed by the variety and confirmation of fistula to be operated upon. The mere passing of a grooved director through a fistulous tract and dividing the tissues over it is very poor rectal surgery and not to be commended. It is this practice that is accountable for much of the rectal incontinence and failures following the operation. When it becomes absolutely necessary to cut the fibers of the rectal sphincter, divide them at right angles regardless of the direction the tract takes beneath them. That class of submuscular fistula where the external opening is posterior to the transverse anal line, and the internal opening in the posterior quadrant (the so-called posterior horse-shoe variety), is regarded as one of the more formidable varieties with which the surgeon has to contend. Yet, if you master its confirmation it is one of the most satisfactory varieties upon which to operate. In operating upon this fistula intelligently incise all tracts except the one entering the bowel. This one should receive a thorough curetting, crucial incision of its entire length and be irrigated with a 1 to 2,000 or 3,000 bichlorid solution, followed by normal salt solution. In dividing the external tracts the ano-coccygeal ligament is cut, which severs the posterior attachment.

Typhoid Fever.

The prevalence of this disease; very often its great mortality will always make it of much interest to the practitioner, especially the younger practitioner. In reference to tonics and stimulants in this disease, William J. Crittenden, in The Medical News, says if he had to discard all drugs save one he would unhesitatingly choose strychnine. This is about what we all would do. It is recommended in all stages of the disease. It is given in the early stages to prevent cardiac weakness; it is given in the later stages to prevent collapse, and during the convalescent stage as a general tonic. Crittenden says: Nitroglycerin is a quick stimulant to a failing heart, but not permanent like strychnine. Digitalin in 1-60 grain doses I found of value in giving the heart rest. A young woman whose heart was beating 140 times a minute, and which kept at that rate unless held down, would be quieted by digitalin and become strong. Turpentine I still find a remedy of great utility in tympanites. In the early stages light wines act well, later on nothing will take the place of good rye whisky or French brandy. In cases in which neither one can be borne by the stomach, recourse must be had to champagne.

Vegetarian Diet.

Albu in Medical Record says that the older belief that an exclusively vegetarian diet is insufficient, owing to its poverty in albumin, is no longer tenable. He gives the results of three investigations, of which one is original, proving that vegetable proteids may entirely replace the animal albumins without interfering with metabolism. As a regular regime for the healthy, however, a purely vegetable diet is too inconvenient, owing to the large amounts that must be consumed, the quantity of undigested residue, the monotony, etc., ever to enjoy more than a limited popularity, but in many forms of disease it may advantageously be adopted. Neurasthenia and neuralgia are especially benefited, and many forms of gastric neurosis do well under it, as also membranous colitis and chronic constipation. Obesity, cardiac and kidney disease, exophthalmic goitre, and many skin affections are all favorably affected. Contraindications are anatomical disease of the stomach or intestinal tract, gastric atony, and all conditions of malnutrition; many persons also exhibit an idiosyncrasy which makes them bear the change badly, and in such cases it should not be persisted in.

Gastric Cancer.

After a review of the symptoms and diagnosis, Graham (Journal American Medical Association) concludes that there is no pathognomonic symptom. We must consider carefully all the circumstances of the case to make a proper diagnosis. Experience in handling the cases has not as yet been superseded by ready-made tests that make a diagnosis for us.

The Eye Symptoms of Tabes Dorsalis.

C. J. Swan, in Clinique, says:

When there is paralysis or paresis of any of the intrinsic or extrinsic muscles of the eye or muscles of the lids, think of tabes.

When there is primary atrophy of the optic nerve, think of tabes.

When there are noninflammatory pupillary changes, think of tabes.

Senile Debility.

R.	Syr. Hypophos. Comp	3 oz.
	Celerina (Rio)	2 oz.
	Acidi Phosphorici Dil	1 oz.

M. Sig.: Teaspoonful four times daily.

Variola.

Small pox, though a very aged subject, it has never ceased to be interesting. It is said by H. S. Reid, in the St. Louis Medical Journal, that small pox, its management, the methods most efficient in preventing its spread, and the final indication of the disease constitute the problem now agitating the minds and taxing the resources of the different State and local health authorities, and likewise the medical profession. It was brought to the United States by the Spaniards in the 16th Century, and ever since that time we have had it in periodical epidemics.

Vaccinated successfully during the first year of life and again the tenth, this kept up during the succeeding generations and we would have no more small pox. If the sentiment of the people is not yet ripe for compulsory xaccination, why not agitate the question and if possible create the sentiment?

What is the Best Way of Prescribing Calomel as a Purgative?

The ideas and methods as to the best way of giving calomel vary as much as the wind, some like large doses, others prefer small doses. Some compound it with other drugs; others give it alone. B. Ray Browning, of Littleton, N. C., writes very interestingly in The New York Medical Journal concerning how to give calomel:

The answer to the query would, it appears to me, depend upon just what conditions are being treated and what is desired to be brought about. The special merit of mercurial purgatives is their cholagogue properties—*i. e.*, to increase the discharge of bile. Calomel possesses this property to a degree This, and its being free from taste and easily retained when other purgatives are rejected by the stomach, make it a purgative of exceptional value. Calomel acts upon the upper part of the alimentary canal, hence it is my custom to follow it with some other general purgative, such as Epsom salts, to hurry forward from the upper canal that which the calomel has carried down from the upper bowel. Now, as to the best way of prescribing it as a purgative, that is determined in my practice by the existing conditions. In that condition generally called billiousness, where we recognize the clinical, though not the pathological, condition, calomel exerts its peculiar beneficial influence at once, curing the condition. I give ten grains, sometimes twelve or fifteen, at night, followed by a tablespoonful of Epsom salts early the next morning. In this condition experience has demonstrated that the single large dose is indicated, whereas in that condition of diarrhœa with acrid, burning stools and some tenesmus, it is better to give one grain as a purgative and corrective at night for several nights. In the diarrhœas of infancy (not cholera infantum) we get the best purgative action of calomel by the administration of very small doses, while in older children the dose is correspondingly increased. In typhoid fever it is my habit to give a single large dose of calomel, ten grains the first day, eight the second, and four the third. This entirely relieves the usually loaded bowel, and to a moderate degree antisepticizes the bowel contents, having at the same time a slight antiseptic effect. Give calomel as a purgative at the beginning of fevers for its peculiar derivative effect, and especially in that variety known as hæmorrhagic malarial fever. Of all purgatives, calomel seems to be more indicated than any other, and this is proved by the results obtained. From ten to twelve grains are given every two hours until four such doses are taken. Under such administration the conditions are markedly changed, the bowels are unloaded, the portal circulation is relieved, and its diuretic action is secured. In all these conditions calomel is a useful purgative, hastening waste and causing elimination of the proproducts by the intestines. As a vermifuge for lumbricoid worms, five grains of calomel at night is an excellent purgative, causing their expulsion. There are any number of conditions in which calomel is a useful purgative, but my belief is that the manner of its administration is best determined by just what is being treated.

Treatment of Infantile Diarrhœa.

This old subject still hangs heavy on the hands of medical men. William H. Robey in the Philadelphia Medical Journal, says the treatment is obviously:

a. To cleans the bowel of the bacteria and their toxic products.

b. To give the remaining bacteria as unfavorable conditions as possible for further production.

c. To soothe the irritated intestine where the continuance of the condition makes this necessary.

d. To support the patient against constitutional symptoms, as fever, nervous irritability, etc., as in other acute diseases of childhood.

e. To guard against infection of others by isolation when possible and by carefully washing the hands after handling the stools in order not to infect other food and common household articles.

Naturally, the small intestine must be

cleansed by a purge, and for this purpose calomel 1 gr. was given in 1-10 gr. doses at half-hour intervals. It has been asked why castor oil was not given since it has such soothing properties. In treating infantile diarrhea, especially in dispensary practice, one must try to accomplish as much as possible at the first visit for obvious reasons. The gastro-intestinal tract of the infant being in an irritable state, the oil is more apt to be vomited; whereas, I have never known this result with calomel; in fact, it will allay vomiting should that dangerous symptom be present. Furthermore, castor oil is such a common household remedy that it may have been tried already, while calomel in divided doses keeps the mother busy and aids her patience in carrying out the second important step in the treatment: starvation

The Use of Sulphate of Copper in Affections of the Cornea and in Affections of the Lid other than Trachonea.

Sulphate of copper is an old remedy and a valuable one. J. Herbert Clairborne says sulphate of copper, in the form of the solid stick, is indicated:

1. In all acute attacks of inflammation of the cornea in which there is thickening with a succulent, velvety appearance of the upper lid.

2. In all recurrent attacks of superficial keratitis in which the same condition of the upper lid prevails.

3. In infiltrations of the cornea which are the result of preceding inflammations, associated with the same condition of the upper lid.

4. In maculæ of the cornea in children and adults which have occurred a reasonable time after an inflammation, whether the upper lid presents the characteristic appearance or not.

6. In chronic conjunctivitis attended by thickening of the lid associated with blepharitis.

6 In chronic dacryocystitis (particularly in those cases in which the canaliculus has been slit) attended by chronic conjunctivitis.

Shock; Its General Consideration and Relation to Surgical Procedures.

Shock was early recognized in the history of medicine, Joseph Hunter first describing it in 1784. Since that time the subject has merited and received the attention of the medical profession. In an article in the Indian Medical Journal, William M. Wright, calls attention to a few points which cover the features considered:

The etiology is not clearly understood, nor is the pathology well defined.

The condition is one requiring prompt recognition and decisive treatment, with the idea of stimulating and sustaining the organs of circulation and respiration, as well as other important organs of the body.

Maintenance of the normal temperature is an essential factor in treatment.

Control of vaso-motor spasm should be attempted and secured if possible.

Determination of blood to vital parts which have been impoverished is a mechanical aid.

Equalization of the circulation should be induced by measures already named.

Early and persistent attempts at compensation for loss of blood should be made by infusion or transfusion, or by the injection of fluids into the cellular tissues.

The susceptibility to infection can be lessened by protecting exposed tissues—infection being to some extent an element of causation.

Reaction is to be established gradually and with care, to prevent the danger of over-stimulation to the vital organs.

The Effects of So-called Catarrhal Diseases of Nose and Throat upon the General Health.

Upon this subject Carolus M. Cobb, in the Journal American Medical Association, July 27th, 1901, calls our attention to the following conclusions:

1. Diseases of the nose and throat affect the general health through obstructed nasal respiration, or by extension of the diseases of bacterial origin.

2. The diseases of bacterial origin affect the general health: *a*, by extension upon the surface membrane; *b*, by the migration of bacteria to surrounding tissues or to distant parts of the body; *c*, by swallowing of the discharge; *d*, by the adsorption of the toxins.

3. The migration of bacteria takes place through the lymph current, or through the blood.

4. Septic infection originating from disease of the nose and throat does not differ materially from infections from other sources.

5. Much of the indigestion from which these patients suffer is caused or made worse by the swallowing of the secretion.

6, A condition of chronic sepsis may be caused by a purulent collection in the nasal chambers or accessory sinuses.

The Treatment of Pneumonia.

Most every day in the year a valuable life is taken away by pneumonia, we read every day of some specific for this disease

from digilates to creosote. To tell the truth we have not a single remedy which we may use with confidence in every case of pneumonia. Leonard Weber discusses this subject in the Post Graduate. Outside of the routine treatment with, strychnine, camphor, digilation and nitro-glycerin and alcohol he gives a number of cases, where in children especially, when they become cynostic, moribund and the pulse hardly perceptible, he reccommends the hot-mustard, both repeated every 4 to 6 hours. In a number of cases cited, he obtained marvelous results. He claims for the both.

I claim for the use of the bath, that it is easily prepared; that the materials for it can be easily procured in the household of the poor as well as the rich; that its action should be prompt; that there is no danger whatever in applying it as often as the urgency of the case may require it, and that it is a valuable means for fulfilling the vital indication in severe cases of pnemonia in children.

The Treatment of Pericarditis and Endocarditis.

J. A. Abet in Medicine says:

Treatment.—The prophlactic treatment of pericarditis and endocarditis depends upon the fact that the majority of these cases are rheumatic. The salicylates should be used thoroughly and early. It is undoubtedly true that the salicylate of soda does not exert any direct effect on rheumatism of the heart already established, but nevertheless the drug limits the rheumatic process, and may possibly arrest its progress before it has seriously injured the endocardial or pericardial structures. There are those who believe that the administration of salicylates predisposes to cardiac involvement. There is not, however, sufficient evidence in support of this view to make it tenable. Alkalies used alone or combined with quinine or salicylates are warmly recommended in some quarters for the treatment of the rheumatic state. Rest in bed should be insisted upon and begun early in the disease. The external application of an ice-bag is used by many on the principle that cold inhabits cardiac action and exerts a favorable influence on the inflammatory process. Some clinicians advocate the use of hot applications; these are particularly indicated for the relief of precordial pain Counter-irritations in the form of mustard paste or the tincture of odine seems at times to give relief. To quiet the heart which is laboring as the result of endocardial or pericardial inflammation, small doses of aconite are sometimes employed. If however, the heart's action be feeble, associated with cold extremities, or if there be the slightest suspicion that the patient is threatened with collapse, if there be cyanosis, or dyspnea, aconite is contraindicated in these cases. Opium in the form of Dover's powders or small doses of the alkaloids may be employed. When a large pericardial effusion causes interference with the heart's movement, aspiration should be resorted to. The needle is best inserted in the fifth intercostal space a trifle to the left of the sternum. It should be directed upward and toward the axillary line. After the valvular lesion has become chronic the patient should be placed upon a nutritious diet. The patients frequently have no subjective symptoms, and require more than anything else rest in bed. Holt, in a recent paper, emphasizes the importance of rest after acute cardiac inflammations. He believes that dilation comes on readily and progresses more rapidly than in adults. He would keep his patients in bed after these inflammatory attacks, not for two or three weeks, but for as many months. When the heart begins to dilate, and compensation fails, cardiac stimulants are indicated. Digitalis, strophanthus, convallaria, and caffeine are used. One or two minims of the tincture of digitalis or strophanthus, given three or four times daily, usually brings about the sought-for results. A recent writer decries thi prolonged use of strychnine in these cases. He maintains that strychnine is of temporary, not of permanent, value. Strychnine is a whip to the heart, not a tonic. Iron and arsenic are indicated for the anemia which is so frequently present. After the patient has sufficiently recovered to be out of bed, he should be in the fresh air as much as possible. Massage, hydrotherapy, and light gymnastics improve the peripheral circulation as well as acting favorably upon the cardiac musculature, and are of value. Violent exercises is contraindicated. Severe mental work or worry, prolonged attention to studies, and school-work exert an injurious effect upon the heart disorders.

The Treatment of Tetanus.

The treatment of this disease says Thomas Craig in Gaillords Medical Journal, the cardinal points to be kept in mind are: To treat the wound locally, to try and illuminate the absorbed toxin, by the kidneys, the skin and the bowels, to support the vitality of the patient; and to select and apply our remedies so as to act on the molor cells of the cone and brain or to automize the action of the toxin by an antitoxin. Dr. Woods favorite remedy in this disease is carbolic acid. He sums up by saying that,

"1. Carbolic acid gives better results in tetanus than does the antitoxin treatment.

2. It acts by antagonizing the toxin and by quieting the nervous system.

3. It should always be given hypodermically, and in large enough doses; cases of tetanus being remarkably tolerant towards it.

4. Other methods of treatment should be continued, of which the discoverer lays special stress on the local disinfection of the wound."

The Toxemia in Pregnancy.

Marx in Boston Medical and Surgical Journal says the toxemia of pregnancy is a condition neither generally recognized nor understood; that it is a disturbance of the metabolism in which, simultaneously with chemical changes in the urine, there appear certain well-marked nervous symptoms that, when not actively treated, inevitably give rise to eclamptic convulsions; that the manifest albuminurias of pregnancy do not enter into this category; that is, not those cases dependent upon acute nephritic changes with such characteristic evidences found in the urine as albumin and casts, but it includes those cases in which the symptoms of a true nephritis are absent. Neither albumin nor casts are present, there is nothing but a progressive diminution of the solid constituents, and our standard of measurement is the amount of urea excreted. In the typical cases of nephritis gravidarum it is not the amount of albumin that should be our index as to when to induce labor, but always the amount of urea excreted. He refrains from active interference so long as there is a good average urea elimination, even with large amounts of albumin in the urine, while on the other hand women apparently well and without the faintest trace of albumin, have been suddenly attacked with fatal eclampsia, in which a timely urea examination might have saved the woman. The regular and methodical examination for urea in all cases he regards as of primary importance to the examination for albumin and casts.

The conclusions he advances are:

1. Toxemia of pregnancy is a complex condition depending on more than one factor.

2. Many women go to term with albuminuria, without symptoms referable to a toxemia. When such symptoms arise they are not caused by the albumin present, but by faulty urea secretion.

3. In the most desperate and malignant cases there is found neither albumin nor casts.

4. Urea is always found markedly diminished in the so-called toxemias of pregnancy, or urinemias.

5. Finally, I make a strong plea for a regular and methodical course of urea estimation in all cases of toxemia, or for the relegation to secondary importance of the time-honored examinatioe for albumin.

6. Progressive diminution of urea excretion, with or without albuminuria, is the sole indication for the induction of premature labor, which is esdecially indicated when conscientious medical treatment fails.

The Treatment of Whooping Cough by Irrigation of the Nares.

Walter Lattey, in British Medical Journal, is a great believer in irrigating the nares for whooping cough. His method is to roll the child up in a shawl so as to confine the arms, and laid face downwards on the nurse's lap. The end of a tube fitting the nostril (soft indiarubber is as good as anything), and attached to a suitable syringe, should then be introduced, and the child having been told to open its mouth, tepid water should be slowly pumped in, followed by an antiseptic solution, which should be weak at first, so as to let the child get accustomed to it by degrees.

As the nares may be more or less blocked by secretion, if the fluid is pumped up quickly, some of it may pass down the throat; hence the necessity of proceeding slowly, and of using only plain warm water at first. Both sides should be done.

Tuberculin.

In using tuberculin three rules must be observed—(Journal of the American Medical Association)—the treatment should only be begun when the patient is free from fever; the dose should not be increased until the last dose is tolerated without reaction. The patient on the day of injection, as well as on the following day, must remain in bed

The Man with a Mooden Leg.

The Medical Dial cites an iteresting case where a man with an artificial leg married a woman without letting her know of his deficiencies as to leg qualities and number, and as a consequence she has deserted him and applied for divorce. It seems there could be as much love for a smooth fitting artificial leg on the part of a woman for a man as if he had the genuine article. Any way, the case is watched with interest.

Wounds of the Venous Sinuses.

H. R. Wharton, in the Medical News, gives an analysis of seventy-five cases of wounds of the venous sinuses of the brain

and makes the following deductions: (1) Wounds of the venous sinuses should be classed as among the more serious injuries, being followed by a high mortality from both extra- and intracranial hemorrhage and from infection; (2) they are especially liable to infection resulting in septic thrombus and pyemia; therefore, the greatest care must be exercised to render them aseptic and to keep them so; (3) the most satisfactory and usually aseptic method in controlling the bleeding is by gauze packing; (4) ligation of the venous sinuses is a procedure of peculiar and definite difficulties which prevent its employment except in those free wounds where the sinus is fully exposed and forbid its application in the ordinary accidents to the sinuses; (5) the tying of lateral ligature upon a sinus is much easier and less dangerous, but is available only in small wounds; (6) the suturing of small wounds of the sinuses is also a very valuable means of hemostasis, but cannot be used except when a small wound is freely in view; (7) forceps pressure is a very ready means of controlling hemorrhage from one of these channels, but has its own peculiar dangers and has really no distinct advantage over the other methods.

Diphtheria in Small Cities and County Districts from the Bacteriological Standpoint.

Without discussing other methods, which may or may not have been successfully applied in controlling diphtheria, Verames A. Moore considers briefly, in the N. Y. State Journal of Medicine, a few facts already demonstrated and generally accepted, which warrant the bacteriologists in holding certain definite views concerning its management.

Diphtheria is a disease produced by the presence of and the effect of the multiplication of the Klebs-Loffler bacillus, usually in the throat or nares of the individual attacked. Without this organism true diphtheria cannot exist.

The Klebs-Loffler bacillus often is, and always could be discovered, in the throat or nares prior to the development of symptoms of the disease.

After the local manifestations have disappeared the organism may still be present. Usually it remains but a short time, but occasionally it continues for several weeks and sometimes for months.

Individuals who come in contact with diphtheritic patients. or those seemingly well but who have the Klebs-Loffler bacillus in their throats, may be infected with it.

Persons who become infected with diphtheria bacilli, either from a case of the disease or a "germ case," may or may not develop the disease. If not, they may unconsciously carry the organisms in their throats for an indefinite period, possibly infecting others but remaining themselves perfectly well.

Individuals who are found to have virulent Klebs-Loffler bacilli in their throats prior to the development of symptoms of diphtheria are known as "germ cases," sometimes referred to as laboratory diphtheria.

7. All persons who are carrying virulent diphtheria bacteria in their throats, whether suffering from the disease, convalescent, or immune, are sources of danger to susceptible people coming in contact with them.

A Plea for Strict Attention to Tuberculodemata.

Being cognizant of the contagious character of a great majority of skin diseases, many of which are tubercular in nature, Noah E. Avonstan, in the Medico-Legal Journal, suggests that the following measures be adopted:

That every physician or dermatologist report cases of tubercular kin diseases, especially those five enumerated, to the local health authorities.

Immediate fegregation of those suffering from leprosy and lupus.

Eczema, ecthyma and lichen should receive thorough and prompt disinfection and appropriate treatment without isolation.

By the enforcement of these measures, it is hoped that not only tuberculosis, but tuberculodermata will gradually vanish and become things of the past.

Hydrophobia.

Undue importance is undoubtedly attached to many of the startling discoveries of recent years, and this can be readily understood in connection with a disease such as hydrophobia when the popular mind is horrified by the agonizing deaths that are pictured and where so much uncertainty exists in regard to an actual infection. C. W. Dulles, (Med. Rec., July 13, 1901) believes that, although the Pasteur treatment is founded upon a scientifically proven basis, the majority of cases which are treated in such institutions are brought there through unwarranted fear and often taken advantage of by the physicians in charge who wish to make the percentage of recoveries as large as possible. Of course, it is impossible to say that a patient, who recovers after being bitten and subsequent treatment without any symptoms of hydrophobia, was or was not really infected, but the enormous increase in the number of cases since the Pasteur method of treatment was instituted

leads one to believe that a large percentage were never infected at all. It is somewhat strange that the vast majority of deaths attributed to hydrophobia have followed bites by unsuspected dogs, so that dog-muzzling laws should be made more general and rigid, and the community should have full and constant protection against dog-bites, irrespective of questions in regard to hydrophobia.

Speech; its Development and Some Impediments.

To acquire a definite conception of the faculty of speech, a knowledge of the architecture and anatomy of the brain and its wondrous functions in general and its speech centres in particular is essential.

Stammering says, G. A. Roberts, in St. Louis Medical Review, is due to excitations from within or from without, causing intermissive impedition of the emissive speech conduction tract, which conveys speech impulses from the articulatory-kinesthetic centre, in which are stored phonetic images and movements necessary to enternalize sdeech, to the neuro-muscular apparatus conserving iu the production of articulate expression, and the reflected concurrent impedition of the pneumogastric nerve causing tonic spasms of a part, or whole of the body and spasmodic closing of the glottis, characterizing speech by involuntary pauses, a complete inhibition of, or an impeded articulation of individual sounds.

Stuttering is due to involuntary super-augmentation of afferent-nerve-force velocity of the peripheral motor-speech mechanism, inciting clonic muscular spasms, and concurrent ataxic action of tue diaphragm, giving rise to vibratile disjoined utterances from inability to connect consonants with succeeding vowels in forming syllabic combinations.

Infrequently, stammering and stuttering are concurrent in the afflicted.

The cause of these defects is inharmony. The treatment consists chiefly of didoctic, psychic, hygienic and occasional medicinal measures, and respiratory and diatonic calisthenics.

When these facile, efficacious methods have been consistently pursued, the patient is rewarded by the correction of the errors, and the eradication of the pernicious habits —undisturbed volition and immaculate speech.

The Diagnosis of Diabetes.

Dr. H. S. Stark calls attention in the St. Louis Medical Review to the following signs and symptoms of diabetes mellitus which are not discussed in most of the text-books: Periodic attacks of headache in obese subjects over thirty-five years of age; extreme and lasting fatigue after a short but violent exercise, and prolonged fatigue, say, of one or two days duration following a slight exertion; slowly failing vision in the aged or quick failing vision in the aged or quick failing vision in the young; certain signs referable to the mouth, such as acid saliva, recedidg gums, fissured and extremely reddened tongue. This is a combination frequently encountered in middle-aged women. Two varieties of symptoms are referable to the heart and its functions—the one set simulating an attack of angina pectoris and a second set presenting the physical signs of arteriosclerosis, or of cardiac hypertrophy. This latter set of cases may be met with not infrequently in obese male subjects with florid countenances and with otherwise healthy appearances. Another train of symptoms is referrable to the nervous system. There are present marked nervousness and physical disturbances; the patient is usually an old man of an ungovernable temper, is easily irritated, and besides, is impatient, has a a morose expression and lacks cheerfulness. Still other symptoms, which should put the clinician on his guard, are premature greyness, premature sexual weakness, diminished patellar reflex, slow healing of wounds cramps in the calves of the legs in the morning hours, accompanied by muscular weariness.

Abnormal Conditions of the Foot as Cause of Knee Symptoms.

Albert H. Freiburg in Cleveland Journal of Medicine says:

That abnormal conditions of the foot may be the cause of pains in the knee with or without themselves presenting subjective symptoms.

Pronated and flat-foot being the most frequent cause of this character, it is possible for shortening of the calf-muscles to be the underlying cause of such knee pain in the presence of pronated foot or of contracted foot.

The attachment of the calf-muscles to the knee capsule through the medium of the plantaris may serve to explain this phenomenon

The Present Position of the Diagnosis of Cancer of the Stomach.

The diagnosis of malignant neoplasms involving the stomach may be impossible, difficult or easy. Consequently, we may be without suspicion, doubtrul or certain of the existence of a cancer in a particular case. Alois B. Graham, in Indiany Medi-

cal Journal, says with regard to the present position of the diagnosis of cancer of the stomach.

First, careful investigations have brought us no pathognomonic symptom; second, we must consider carefully all the circumstances of the case in order to make a proper diagnosis; third, experience in the handling of cases has not as yet been superseded by ready made tests that make a diagnosis for us.

The Practical Points in the Treatment of Threatened Asphyxia.

Robt. L. Bowles in Journal American Medical Association. The author finds, according to his examination, that in cases of drowning in man, water does exist in the lungs, and is effectually expelled only very gradually and after a long time; and that it is absolutely impossible to produce relief in such a case by the Sylvester method only. He says it would be better to let the patient lie on one side and trust to Nature, rather than to have recourse to measures which would cause the forcible inspiration of air before evacuation of water had been sufficiently effected. Artificial respiration, valuable as it is, if injudiciously employed, becomee really a source of increased danger; therefore, the Marshall Hall method should be preferred.

Hemorrhoids.

J. P. Tuttle (The New York State Journal of Medicine), believes that in many ecute cases of internal hemorrhoids we should have recourses to local and general meastres rather than to operative procedures. Cold water enemas once or twice a day in order to produce smooth and easy movements of the bowels, and at the same time cause contraction of the blood vessels, are very beneficial. At the the same time injections of mild non-irritating astringents such as fluid extract of krameria, fluid extract of hamamelis, or fluid extract of pinus canadensis, will have a very soothing and curative influence. Suppositories of ichthyol, tannic acid and belladonna are often of great benefit, except where there is a mild degree of hemorrhage. Iodoform is also sometimes of much benifit, especially if there is an eroded condition of the parts. Resinous cathartics, such as podophyllin, aloin, gamboge, etc., irritate the parts and should not be used. Small quantities of saline laxatives, especially sodium phosphate before breakfast, followed after breakfast by the cold enema, will have a much better effect on the liver and the hemorrhoids as well, than any more drastic measures.

Poverty and Degeneracy; Their Cause, Prevention and Cure.

In this country alchol and tobacco are the two leading causes of poverty and degeneracy. by the people of Asia and East Indies opium is the chief agent used, while in America alchol and tobacco take precedence in all grades of society. Concerning this vital question N. S. Davis in the Journal American Medical Association, says:

The daily or habitual use of alcoholic drinks, even in moderate doses, not only impairs both health and morals and leads to slow tissue degenerations. but also so impairs the metobolic and nutritive processes as to render the individual more liable to attacks of all acute infectious diseases, and more liable to die when attacked, has been full demonstrated not only in the laboratory of the scientists, but also in every field of human labor and in every variety climate.

It is, whether alchol and other well-known narcotic drugs are really wholesome articles of drink or food, safe for general use; or are they absolutely subtle, deceptive and dangerous poisons, stealthily destroysng both public health and morals, and constantly multiplying hereditary degenerates in all classes of human society? If the former, they are entitled to the same treatment as other articles of commerce and general use. If the latter, then their regulation belongs exclusively to the police and sanitary authorities, aided by the courts. They can not be both. That the alcohol, as it exists in fermented and distilled liquors, is a positive proto-plasmic poison, directly impairiog every natural structure and function of the living body in proportion to the quantity used, and the length of time its use is continued, is proved by the results of every experimental investigation concerning it, instituted by eminent scientific men both in this country and Europe.

Their verdict is abundantly confirmed by the history and condition of the inmates of every asylum for the poor, the feeble-minded, the epileptics, the insane and the inebriates; those of every reformatory and prison; by the records of every police and criminal court; and by the details of every well-kept registry of vital statistics. As concerns danger to human life, every intelligent readers of the public press knows that the ordinary use of alcoholic liquors by persons claiming to be in health, is the direct cause of more suicides, homicides and murders every month, than is produced by all the other poisons known to toxicologists in a year. Then why not now, at the

beginning of this twentith century of the Christian era, cease calling alcohhlic liquors stimulants or restoratives, and not only speak of them as subtle and dangerous poisons in every household, but also concentrate all the facts of science, clinical experience, and of economic and criminal records, in favor of having alcohol and all liquids containing 2 per cent. or more of it, placed on the statutes of the several states along with arsenic, strychnin, etc., to be sold and used under the same regulations and penalties as other poisons dangerous to the public health and morals? If this were accomplished it would soon remove one of the chief corrupting influences from the field of politics, and place it under the domain of the police and health authorities, aided by the courts, where it legitimately belongs. And it would do more to prevent tuberculosis and all forms of human degeneracy than all the other measures combined.

Pilocorpin Hydrochlorate and its uses in Croup.

Antitoxin has a rival in the article known as pilocorpin administered hypodemically in croup. S. E. Wertman in American Medicine, is a great advocate of this running in this disease and he cites five cases of children snatched from the jaws of death, by administering this remedy hypodermically in 1-32 gr. doses to children 4 years of age directly over the somach. In the five cases he reports are made miraculous recoveries, Antitoxin has been the favorite, but we watch with interest this new panacea for croup.

The Fight Against Tuberculosis.

Prof. Robert Koch concludes a valuable article in The Journal of the American Medical Association in these words:

If now, we glance back once more to what has been done hitherto for the combating of tuberculosis, and forward to what has still to be done, we are at liberty to declare with a certain satisfaction that very promising beginnings have already been made. Among these I reckon the consumption hospitals of England, the legal regulations regarding notification in Norway and Saxony, the organization created by Biggs in New York—the study and imitation of which I most urgently recommend to all municidal sanitary authorities—the sanatoria, and the instruction of the people. All that is necessary is to go on developing these beginnings, to test, and if possible to increase their influence on the diminution of tuberculosis, and wherever nothing has yet been done, to follow the examples set elsewhere.

If we allow ourselves to be continually guided in this enterprise by the spirit of genuine preventive medical science, if we utilize the experience gained in conflict with other pestilences, and aim, with clear recognition of the purpose and resolute avoidance of wrong roads, at striking the evil at its root, then the battle against tuberculosis, which has been so energetically begun, cannot fail to have a victorious issue.

State Board of Medical Examiners.

Not many years ago it seemed to the majority as it now seems to some of those interested in the advancement of medical education, that diplomas from chartered colleges or schools gave sufficient assurances that their posessors were qualified to practice in the general or special fields of medicine in which degrees had beed confered upon them and that the diplomas granted served as an adequate standard for license. In the progress of time all this has been done away with and State Boards established. William Carr, in The Journal of the American Medical Association, says:

In twenty-three States, however, the diplomas of even the best schools no longer afford a license to those upon whom they are conferred, but only serve as one of the qualifications of candidates for examination before State Boards. This separation of the licensing power from the diploma has proved beneficial to the really reputable schools, some of whom strenuously opposed it. When the diploma constituted a license, faculties seem to have been swayed, insensible perhaps, by a feeling that the payment of fees on the part of a student, especially if he were somewhat diligent, established a contract right on his part to receive collegiate authority to practice upon the public, and, as a consequence, the standard of education was low, compared with the standard of to-day. With the abolition of this right to license, which was an apparent, not a real, privilege, the value of a diploma was presently perceived to be proportionate to the reputation of the institution conferring it, which, in turn, was incited by self-interest as well as love of scholarship, to raise its standard and confer its degree only upon those earning it. The period of study has been extended, and if the medical and dental laws have accomplished no other result than the raising of the standards, they find in that alone their ample justification.

Castor oil has cured many cases of trifacial neuralgia.

How Did He Know?

Klebs is of the opinion that inhalation tuberculosis is very rare. In between 4,000 and 5,000 autopsis he was able to discover but one instance, which occurred in a young girl, who had nursed a tuberculosis patient. He thinks the reason for this is that the tubercle bacilli are very rapidly killed by drying. Certain experiments that he has undertaken prove (?) this fact conclusively. He believes that the frequent involvement of the apices of the lungs is probably due to original lymphatic infection. He also believes that laryngeal tuberculosis may arise in the same way.

The Leading Editorials of the Month.

Kindness and Courtesy in Hospitals.

There is no place on earth where kindness and sympathy is more appreciated and lasting than that received in a hospital. Wherever we see the Red Cross flag waving we know that under its care are the injured and afflicted, and our sympathies and tender feelings, fellow man to fellow man, are extended and recognized. The same gentleness and kindness we should have to hospital patients. The American Medicine very beautifully expresses this idea in the following editorial:

Kindness and courtesy in hospitals is of far more significance than is usually supposed. Although written with no prejudice against the medical or nursing professions, the article, "A Day in a Paris Hospital," in the April number of the Contemporary Review, brings out a common fault both of physicians and nurses, the ease with which we slip into the rut of doing our work mechanically and as a task we have undertaken, without putting into it the consideration for the patient's feelings, the geniality, the humane quality we feel and show in treating private patients, or in meeting friends in social life. The gentleman is not made by studying medicine, the cold-hearted and the brutal may not unlearn their cruelty even in our work, which certainly, more than others, encourages gentleness and the heeding of others' sensibilities. There is nothing that more certainly generates the much too common hatred of the profession by the ignorant laity than the remembrance by a patient of an injustice, hardness of heart, or coarseness exhibited by physician or nurse. What a horror to the sick when a death is allowed to take place before their eyes. The minds of those who are ill are peculiarly susceptible and also peculiarly alert. A careless gesture, tone of voice or word that reveals the bad nature is seen and sticks in the memory in all the after years. We in the United States are exceptionally free from the foreigner's haste, harshness and business-like heartlessness, and yet every good man must have seen things in our hospitals and dispensaries that rankle and hurt both person and profession. Possibly there is as much virtue and healing power in manners as there is in medicine.

Plague on its Travels.

So far the plague has made no headway in this country. This is due to the careful watchfulness on the part of the sanitary authorities of this country. We give an editorial from the Philadelphia Medical Journal concerning this subject:

The fact that our Pacific coast is more or less constantly threatened by the approach of plague is shown by the prevalence of that disease in the several countries which border on that great sea. Recently the steamship Carlisle City arrived at San Diego, California, with the report that several of her crew had died of plague en route. This vessel touched at Honolulu, Hawaii. At that time only one member of the crew had died, and the disease does not seem to have been recognized at that port. After she left the Sandwich Islands the disease broke out with renewed violence, resulting in a number of deaths before the vessel reached California.

This event need not be taken as a cause for panic. It should simply be recognized as indicating the need for extreme caution on the part of the health authorities on the Pacific coast. Plague is prevalent now in Honolulu, which is one of our newly acquired possessions, and which is in constant and direct communication with this country. A letter from Surgeon L. E. Cofer to Surgeon-General Wyman, under date of June 8th, gives details of a number of fatal cases in that island. Dr. Cofer believes that the appearance of the disease at this time is a recrudescence similar to what has occurred in other places. Plague is also prevalent actively in Amoy and Hongkong, in China. In fact, the Carlisle City sailed from Hongkong, where, apparently, she took on the disease. Bubonic plague in epidemic form has appeared at Amoy, in China, two weeks earlier than last year. This is probably due to the early warm rains following upon a long dry winter. The spread of the disease at that place has been rapid and the fatalities most appalling. According to United States Consul Johnson one hundred deaths per day have occurred in Amoy and its suburbs. In Aus-

tralia the disease has been studied and controlled, we believe, in a masterly way. To be forewarned is to be forearmed, in the opinion and practice of all trustworthy health officers. We do not doubt that the United States authorities are thoroughly alert to the situation.

More About Anesthetics.

According to the Philadelphia Medical Journal the problem of anesthesia will not stay down. Ever and again it rises in one form or another to prove to the world that, despite all study and apparatus, it has not yet been thoroughly solved. There can be question that ether is not an ideal anesthetic, although in this country it is, and to an interesting extent in England and on the continent of Europe it is becoming, the favorite of surgeons. The objections are obvious. The irritation of the throat, with consequent excessive secretion of mucous and saliva, resulting in difficult respiration and occasionally in cyanosis; the slowness with which the anesthesia is produced; the difficulty in producing it in alcoholics; and the fatal subsequent effects of the form of inspiration pneumonia and renal irritation, and possibly weakness of the heart, must always be taken into account. On the other hand, chloroform, which has so few of these disadvantages, has the fatal defect of causing not infrequently paralysis of the heart or respiration during administration. Recently, Braun (Muenchener Medicinische Wochenschrift, May 14, '01) has suggested a modification which to his mind solves the problem; as many men have thought to solve it before. by the introduction of some modification. But Braun's method deserves much credit for its ingenuity, and the results which he reports are quite imposing. He believes that a mixture of the vapor of chloroform and ether, will diluted with air, will anesthetize the patient very rapidly, irritate the fauces but slightly, and avoids most of the immediate dangers of either method alone. Simple mixtures of ether and chloroform cannot be usud with advantage on account of the fact that in the early stages the proportion of the ether vapor is greatly in excess of the chloroform vapor, and in the latter stages the chloroform vapor becomes predominant; exactly the reverse of the condition that would normally be desired. He has, therefore, contrived an apparatus which he believes furnishes a constant supply of diluted vapor in uniform proportion. This consists essentially of two bottles of different sizes, each with a cork perforated with two holes. Through one of these holes a long tube is passed which is united with another tube passing through the cork of the other bottle by two rubber tubes and a "T." To the free end of the T another rubber tube is attached at the end of which there is a rubber bulb and a bnlloon,so that air can be pumped into the bottles. The capacity of the bulb should be about 90 ccm., of the larger flask 200 ccm., and of the smaller flash 100 ccm. Through the holes of the corks two other tubes are passed, stopping above the level of the liquid, and also connected with two rubber tubes and a "T." The other end of the tube communicates with a metal mouth-piece supplied with a valve on one side. The ends of the long tubes supplied with stop corks regulating the amount of air that is admitted into the mouth. The mouth-piece is placed over the patient's mouth and nose, the stop-corks arranged, and air pumped in at the beginning of each inspiration. When both stop-corks are open, about 4 parts of ether vapor to one of chloroform vapor well diluted with air, are administered. Usually it is desirable, as soon as the patient loses consciousness, but before the corneal reflex is lost, to close the stop-cork in the chloroform flash and to continue narcotization wi h the ether alone. If the patient begins to recover during the operation, a small quantity of chloroform should be again employed. In cases in which operations are performed upon the mouth, the metrl funnel is replaced by a small tube passed through the nose into the pharynx, and the vapor is delivered directly to the larynx.

Braun has used his method in 250 cases. The average duration of narcosis was 47 minutes, the maximum, however, was $3\frac{1}{2}$ hours. The average amount of ether used was 54 ccm.; of chloroform, 12 ccm. Usually it required from 6 to 8 minutes to render a patient unconscious. Whether this method, which appears to haue something to rocommend it, will succeed in obtaining general employment or not, remrins to be seen. The fear of chloroform in this country is so great that it probably will require more than 250 cases (even though these all terminated very satisfactorily) to secure its recognition.

The Treatment of Gastro-Enteric Infection in Infants.

According to the Medical Advertiser:—

Now is the season when gastro-intestinal disease in infants is very common. While this is an old, perhaps worn out, subject, it seems wise, on account of the serious nature of the disease, to rehearse, as it were, our present methods of treatment.

Given an infant suffering from diarrhœa and vomiting, what is to be done?

Try first to ascertain the character of the process which is taking place. Is the diarrhœa due merely to an acid decomposition of the carbohydrates or fats in the food, or a putrefaction of the albuminoid constituents?

This is determined by the symptoms. In the first class the infant has little or no fever, there is no general depression and the circulation is good. In the latter classes the symptoms vary, but usually fever and prostration is marked. In the first class, the stools are thin, acid or rancid in odor; in the second class, the stools have an offensive odor.

In either case the iron rule is to take the baby off of milk. Do not give milk for twenty-four hours or longer.

Give a purgative, as castor oil salines or calomel. If the symptoms are severe wash out the stomach and colon.

If the diarrhœa is due to acid diarrhœa the best food for twenty-four to forty-eight hours is egg water or meat broths.

If the disease is a proteid decomposition, give nothing but plain water for ten or twelve hours, then give rice water or barley water.

The return to normal diet must be very gradual. Thus when given rice or barley water a little whey should at first be added to the water, and if this agrees a little milk may be added to the rice water. But the milk must be discontinued if the symptoms increase in severity.

In regard to medication it may be said that the bismuth salts still hold first place. Outside of this drug intestinal antiseptics have been mostly discarded, but often they do a great deal of good.

In the more persistent cases the tannic acid compounds are beneficial, such as tanalbin, tanalgen, but all are probably not much better than tincture of catechu.

In many severe cases, it must be remembered that time will bring a cure. Like typhoid fever we must treat symptomatically until the infection is overcome.

Dangers of Precocity.

According to Medicine, in man growth after the third year is, though an absolute necessity, an adaptation to environment. As Havelock Ellis remarks (Man and Woman), it is to some extent growth in degeneration and senility. It is not carried to so low a degree as in the apes, and among the lower human races. The child of many African races are scarcely, if at all, less intelligent than the European child, but while the African as he grows up becomes stupid and obtuse and his whole social life falls into a state of hidebound routine, the European retains much of his childlike vivacity. Although precocity is hence considered by biologists as an expression of premature senility, still many fond parents take a different view.

Precocity, as Lombroso (Men of Genius) has said, is generally an expression of defect. Lombroso, however, does not demarcate the precocity due to environment, which may be normal and often is really imitative, from precocity which is the expression of premature senility. Lombroso remarks: "Dante composed a sonnet to Beatrice at seven and Tasso at ten. Compte and Pascal were thinkers at thirteen, Fournier at fifteen, Niebuhr at seven, Jonathan Edwards at twelve, Michael Angelo at nineteen. Gassendia preached at four, Bossuet at twelve, and Voltaire at thirteen. Pico de Mirandolo in his childhood knew Latin, Greek, Chaldaic, Hebrew, and Arabic. Goethe wrote several languages before the age of ten. Wieland at seven knew Latin, meditated an epic at thirteen, and published a poem at sixteen. Lopez de Vega wrote his poems at twelve. Calderon published his 'Chariot of Heaven' at thirteen. Kotzebue attempted comedies at seven, and wrote his first tragedy at eighteen. Victor Hugo wrote 'Irtameus' and published, before the age of twenty, 'Hans of Iceland,' 'Bug-Jargal,' and his first volume of 'Odes and Ballads.' Lamennias wrote the 'Words of a Believer' at sixteen. Pope wrote an 'Ode on Solitude' at twelve, and at sixteen his 'Hours of Idleness' at eighteen. Moore translated 'Anacreon' at sixteen. Meyerbeer was an excellent pianist at five. Claude Joseph Vernet drew in crayons at four, and was celebrated as a painter at twenty. Wren invented an astronomical instrument and dedicated it in Latin to his father at four. At thirteen Ascoli published a work in Wallachian and Trioulian dialects. Metastasius improvised at ten. E. Q. Visconti was a marvel of intelligence at sixteen months, and preached at six years. Fenelon preached an excellent sermon at fifteen. G. Wetton could translate Latin, Greek, and Hebrew at five, and at ten knew Chaldiac, Syriac, and Arabic. Mirabeau preached at three and published books at ten. Handel composed a Mass at thirteen, at seventeen composed 'Florinde' and 'Nero,' and at nineteen was a theater director. Raphael was renowned at fourteen. Relief de la Bretonne had read much at four, seduced girls at the age of eleven, and at 14 composed a poem on his twelve mistresses. Eichborn, Mozart, and Eybler gave con-

certs at six. Beehoven composed three sonatas at thirteen. Weber's opera, 'The Wood-Maiden,' was publicly represented when he was fourteen years old. Cherubini enthused the populace with a mass at thirteen. Bacon conceived his 'Novum Organum' at fifteen Charles XII. planned his conquest at eighteen."

Physical Therapeutics.

The Boston Medical and Surgical Journal says: It is significant that two comprehensive books on therapeutic measures other than the use of drugs are simultaneously appearing in Germany and America. To anyone who has observed recent tendencies in therapeutics, it has become apparent that the field of what we may call natural means of cure has expanded remarkably within the past few years, and is destined to take a dignified place among recognized therapeutic methods. This advance in medical opinion has been slow in coming, in spite of, or perhaps we might more properly say, because of, excessive individual enthusiasm in the advocacy of certain methods of treatment. A general acceptance of an entirely rational therapeutics very naturally must wait until the limitations of accepted methods are definitely ascertained, and, until the conviction has taken deep root that as physicians our therapeutic endeavors are, in the great majority of cases, merely aids to natural processes. We hear much less nowadays among the well-informed of "remarkable cures," and much more of "skilful treatment," a statement which represents the facts as the other does not. Mr. Dooley, no doubt, speaks from experience when he sums up the situation in the following words: "If the Christyan Scientists had some science, an' th-doctors more Christyanity, it wudn't make anny diff'rence which ye called in—if ye had a good nurse."

Physicians should make clear themselves their limitations, and should act accordingly. Medical students in particular should be far more impressed with the fact than they usually are, that the natural tendency in the human body is toward health and not toward disease, and that therapeutic measures should often be directed to a support and encouragement of that tendency, rather than to the fancied treatment of a specific symptom or group of symptoms. A course in therapeutics might well be enlarged to include a consideration of the means of preserving health, as well as of meeting abnormal conditions when they arise in the course of disease. In other words, what we need is a broad point of view and a complete rationalism in the treatment of the sick. This is likely to be attained in the near future, and no better indication of its coming could be found than the two treaties to which we have alluded. The first of these, entitled a "Handbuch der Physikalischen Therapie," is under the editorship of Drs. Goldscheider and Jakob, of Berlin, assisted by a large number of collaborators. It has as yet appeared only in part, but when completed is designed to be a scientific exposition of means of treatment other than by drugs. The book will receive a more detailed notice in the review columns; we allude to it here merely as an indication of the fact that methods of treatment hitherto more or less empirically used, are receiving at the hands of competent men the systematic discussion and exposition of which they have long stood in need. In America a similar treatise, finally to extend over eleven volumes, of which two have as yet appeared, is being published under the editorship of Dr. Solomon Solis Cohen. The title of the series is "A System of Physiologic Therapectics," and concerns itself with a practical exposition of the methods than drug-giving, useful in the treatment of the sick and in the prevention of disease.

Various books, many of them excellent, have from time to time appeared on special subjects treated in these volumes, of which Paruch's Hydrotherapy is an example; but the significance of what we may regard almost as a new therapeutic movement lies in the systematization of a large body of related facts, and their orderly arrangement as a system of rational therapeutics. It is easy to exaggerate the importance of any one method of treatment when enthusiasm is once thoroughly aroused, but we are convinced that a sober, scientific presentation of all details bearing not only upon the relief of disease, but udon its prevention, will do much toward raising the standard of medical treament.

Medical Nomenclature.

In reference to the making of new words, the Boston Medical and Surgical Journal, says that medical men are greater sinners than any other men of science.

In any rapidly developing science the question of nomenclature is of far greater importance than appears on the surface. The temptation to coin words is apparently inherent, and he is a rare person who can make a discovery and refrain from designating it by some new word of his own choosing. We are not prepared to say that physicians are greater sinners iu this regard than other men of science, but they certainly not exempt from the prevailing

weakness. Unquestionably the word-making tendency should be combatted at every turn, either by including the pioneers of research to adopt as far as possible words already in existence and of recognized meaning, or if this be beyond the power of public opinion to accomplish, to refrain from using such newly coinen words. Many a name, no doubt, has quietly sunk into oblivion, because it has not been taken up and perpetuated by workers in the same fiield. Others have survived and proved useful, and these with seme exceptions, have been really needed.

An almost equally pernicious tendency is the attempt to eradicate words and terms long in use and generally understood by others, perhaps of more logical constrtction, but wholly new. The attempt t o revise the nomenclature of the blood and of the central nervous system are cases in point. This leads to hopeless confusion,and stands directly in the way of the natural evolution of language.

Another habit against which a warning note should from time to time be raised, is the misuse of scientific terms commonly employed, or the unnecessary use of more than one word, when one should give the full meaning. A very common example of the first error is the use of the word "pathology" when "pathological anatomy" is ment, an error which is to be found in the catalogues of a large porpotion of our best medical schools. Pathology is a comprehensive term and pathological anatomy is a limited one,a fact which few who use these terms recognise. A very recent tautology, brought about partly we suspect by the publishers of books and partly by a desire to render apparent the practical application of scientific methods, is exemplified by such a title as "Clinical Pathology of the Blood." If the pathology of the blood is under consideration, the word "clinical" is entirely superfluous; if the pathological anatomy of the blood is being discussed, the addition of "clinical" is meaningless, "Pathology of the Blood" is quite sufficient to convey the full idea of the subject-matter of such books. Physicians are rather proverbially careless in their use of language and publishers are indifferent, provided only their publications will sell. Between the two many things are printed which it would be well to have suppressed, for the future good of our already involved and inaccurate nomenclature.

Prevention of Disease.

An ounce of prevention is worth a pound of cure. This is well expressed in the following editorial from Gaillards Medical Journal.

It has happened more or less often that we, as practicing physicians, have met with cases of infectious diseases in which no source of contagion could be traced. When these cases occur in well-to-do families, and more especially in those families who are very particular in regard to exposure to any sort of infection, the question naturally arises, how do these cases of unknown infection arise or what can cause them? Often the attending physician taxes his ingenuity to the utmost to try to explain this seemingly complicated source of disease infection. We have in mind several cases of diphtheria that have recently occured in families that are well-to-do and who were very zealous in trying to guard against any possible source of infection and have never been exposed to any previous case of dephtheria that could be traced. One of these cases in particular had been confined to the house by a surgical operation for some weeks previous to the outbreak of the disease, but yet, notwithstanding these things, in the second case a typical case of diphtheria developed and large amounts of false membrane occurred over the tonsils and pillars of the fauces. We have mentioned before, no source of infection could be found, no exposure to any known source could be traced, and no explanation could be made, but yet here were two cases of diphtheria occuring and no explanation could be given for their occurrence.

When we come to anayze the dlfferent foci of infection of the infectious disease we naturally have to look a little beyond the fact of these people coming in contact with previous cases of known diphtheria and reach after a cause further back. Within the past year we published another article on this same subject, but in that case it was easy to trace the source of infection, and in that article we called attention to the fact that the health officer of the city often discovered cases of scarlet fever and diphtheria in the tenement house sweat shops, Where many of our clothes are made. In connection with this we might cite the fact that recently a gentleman who was formerly connected with the Health Department of one of our eastern cities, in conversation on this subject, told the writer that he had, on more than one occasion, while making inspections of these sweat-shops, where all manner of clothing is made and sent to our tailors and retail stores, discovered cases of diphtheria and scarlet fever that had not been reported to the Health Department, and in some instances the sick children were fonnd reclining on the

clothes that were waiting to be finished. It is needless to say that in these cases prompt quarantine was established and proper disinfections carried out, but it is to those cases of infectious diseases that are not reported that we wish more particularly to call attention to. When we remember the tenaciousness with which the diphtheria bacilli and the smallpox and scarlet fever contagia hold on to the fabrics, it is no wonder that we often hear of the so-called sporadic cases of this disease occurring in places where no previous disease had been for many years. The explanation is easy; infected clothing from the sweat-shops was packed and shipped to a distant part of the country, and found its way into families of children, and disease was the result. Just so we have to look for an explanation in those seemingly hidden sources of infection occuring here in the city. The poorer class of people who carry on this tailoring work care nothing for cleanliness, much less for disinfection. They will not employ physicians, consequently the cases go unreported and no disinfection is carried out.

Not long ago we called attention in these columns to the bacd-yard carpet shaking, to the dusty street sweeding, the moving of infected household things through our streets and particularly to families moving into infected houses. If the health officer was given more money, so that more help could be procured and more disinfection carried out we would have far fewer suources of infection.

Our health officer should be given a corps of men who would regularly and systematically inspect these sweat-shops where clothing is manufactured, and the failure of any one of these manufacturers to report a case of sickness should be tanamount to a heavy fine. If the health officer was clothed with more authority, given better means by which these things could be carriesd out, we are confident that there would be far fewer cases of infectious disease; we would live in more security from danger from these sources. The prevention of disease is more often better than the cure of it.

The Administration of Anaesthetics.

The following editorial is taken from the Australian Medical Gazette.

The report of the Committee on anæsthetics is to hand, and already has called forth reviews and criticism in our journals. Every phase of the subject has been investigated clinically from the records of 29,-920 administrations, and the conclusion of the Committee, as far as supplying anything definite for the guidance of those who are called upon to administer anæsthetics, are disappointing. The cases recorded are mostly chloroform and ether administrations, where it is shown that a very large porpotion, 97 per cent., showed no intolerence of the drugs. This is common experience, and has been daily demonstrated since the general adoption of surgical anæsthesia; the other cases "went wrong," more or less, in some the difficulty was slight, in others, methods of restoration had to be used, and in twenty-four deaths occurred, four only died under ether administration, and these deaths, the Committee state, cannot be attributed directly to the anæsthetic. So we find a confirmation of what has been general experience for some time, e. g.—That ether is a far safer general anæsthetic than chloroform, chiefly because, under its influence, comparatively few instances of untoward phenomena referable to the circulatory system present themselves, and those occurring referable to the respiratory system are trivial. So we must say, "use ether wherever you can."

The only other conclusion to which importance may be attached is the final and single general conclusion "that by far the most important factor in the safe administration of anæsthetics is the experience which has been acquired by the administrator." Mr. George Eastes, in his remarks on the subject, says. "As to his final recommendation, it may be possible to act upon it in hospitals and big towns, but practitioners everywhere must, in emergencies, be prepared to administet anæsthetics. No one, therefore, should be allowed to qualify until he or she has shown proficiency in this very important branch of medical work.

We are, therefore, to examine carefully our cases of operation, and choose the anæsthetic most suitable to the case, giving ether the preference where possible, and then ask somebody who is well experienced to conduct the administration; this will ensure the greatest measure of safety to our patient. Part of the general conclusion of the Committee is that "In many cases the anæsthetisation completely transcends the operation in gravity and importance, and to ensure success, particularly in these cases, it is absolutely essential that an anæsthetist of large experience should conduct the ad ministration."

The question arises, should the administration of anæsthetscs be the work of a specialist? In the larger cities at home it is so. It has been suggested that there would be good prospects for some of the

profession to adopt this specialty. At present, in view of the report of this Committee, especially in its final suggestion, we should urge those responsible for directing the training of medical practitioners to pay more attention to the object of anæsthetics in the medical cirriculum. Certain extra and special subjects are being dealt with in lectures, the attendance on which is optional, but the subject of anæthetics and their administration is not included. Surely a course of say, ten lectures on this important subject might well be included. As it is, it is simply dealt with in the ordinary lectures on the Materia Medica and Surgery, with a few practical hints from one of the Senior Residents in Hospital.

The overwhelming evidence in favor of ether as a general anæsthetic demands that students and residents should familiarise themselves more with its use, and we would then find that the ordinary general practitioner could co-operate with the surgeon in any case of operation without having to call in the assistance of a specialift, and without any anxiety to the operator.

Therapeutic Optimism Versus Therapeutic Nihilism.

According to The Therapeutic Gazette, for nearly twenty years the writer of this editorial when teaching therapetutics has endeavored to impress upon his pupils the fact that therapeutic optinism when carried to the point of irrational procedure is to be strongly deprecated, and he has also endeavored to combat the ideas which have been advanced by certain persons who have endeavored to prove the truth of the old maxim that "a physician is a person who administers remedies of which he knows nothing for diseases of which he knows less. There can be no doubt that the careful observer of modern therapeutics is in one sense "between the devil and the deep sea" when he studies these two opposing factions in the medical profession. On the one hand, he sees an array of medical men who seem to think it possible to remove organic lesions and even to replace lost organs by the administration of medicaments, and he reads with grief and shame the reports of cases in which creosote has cured far advanced pulmonary tuberculosis, chloride of gold remedied chronic contracted kidneys, and iodid of potash cured locomotor ataxia; while all about these fictions and mistaken reports is a circle composed of an immense number of synthetic products made by the chemist, and "boomed" by him for pecuniary returns without being possessed of real therapeutic merit. On the other hand, he sees physicians who are so intent upon the study of pathological and etiological processes that they day no attention to the proper application of remedies in the treatment of disease, and are so buried in the interests of pathological research in the dead room that they lose all grasp of the *vis medicatrix naturae* and of the real power of drugs for doing good.

As we have said bfore the capable modern phpsician is one who avoids both of these extremes, and who, while recognizing his limitations in bothe directions, sets himself to a grave study of the needs of his individul patient and of the remedy which will meet these needs. Our attention is called to this important matter by an article written by Dr. Peabody, in the Medical Record for March 30, 1901, entitled "Some Fallacies of Therapeutics." While we differ from this well-known writter in a number of the points which he makes in his article, there are others which seem to us so worthy of remark that we cannot pass them by. Thus, he states that we are now looking at a time when the ingenuity of the chemist, the cupidity of the manufacturer, and the honest zeal of the physician conspire to multiply therapeutic agents and procedures; and he might have added that there are also physicians not inspired by honest zeal who now and then write paid-for papers lauding to the skies some new drug, although they really have had no adequate experience with it. He then proceeds to call attention to the fact that many of the so-called tonics that are placed upon the marked depend more upon the alcohol which they contain than upon any of the medicinal substances said to be in them. This is particularly true of the various bitters which are widely advertised, and which in reality exercise little influence except for the alcohol which they contain, although many of them are sold as non-alcoholic and as remedies by means of which the alcohol habit can be broken up. Another fallacy which he points out, and which undoubtedly is widely spread, is the belief that tannic acid when given internally is of no value for the purpose of acting as a hemostatic upon bleeding in remode organs, as, for example, the kindeys or uterus. Whether we believe that tannic acid circulates in the blood as an alkaline tannate or as a gallate, it is certain that it is capable of forming coagulation of albumin only as tannic acid. So, too, he points out that ergot is a practically valueless remedy in hemorrhage from the pulmonary vessels, since it is known to increase the pressure in the pulmonary artery, and, as we have pointed out, these vessels are without vasomotor nerves, and therefore cannot be stim-

ulated to contraction by this drug. Again, as we have often pointed out, the use of lithium with the idea that it will aid in the elimination of uric acid is in the majority of cases useless, because it has a far greater affinity for the acid sodium phosphate of the blood than for the uric acid, and also because there is very grave doubt as to whether uric acid is the cause of the various conditions which are attributed to it; in most cases it being the alloxuric bodies and closely related substances which produce the symptoms.

On the other hand, there are two or three points in Dr. Peabody's paper to which we must take exception. He states very positively that there is practically no proof that bitter substances—as, for example, strychnine—are of any value as appetizers. We do not know what sort of proof he desires in a matter of this kind, but we believe that the vast majority of skilful practitioners have constantly seen the administration of strychine and other bitters, without the associated use of alcohol, result in an increase in appetite and an increase in digestive activity; and in the case of strychnine this is not only due to the influence of the bitter tonic upon the mucous membrane of the stomach, but is also due to the increased nervous energy which it is said to give to the digestive nervous organs under its influence.

Another point to which we must take issue is the statement that calomel is a "hepatic sedative," and still more positively do we take issue with the statement that iodide of potassium does not increase the elimination of lead by the kidneys in cases of lead poisoning. We have not infrequently known the urine of such a patient to be examined for lead with negative results for many days. After this iodide of potassium has been administered, and immediately lead has been found in the urine; and while we have no doubt that lead is usually eliminated by the intestines, as he says, we still believe that iodide of potassium is a useful drug in aiding its elimination in both ways, in that it forms doubly soluble iodides which are then really passed out of the body. We heartily agree with him when he points out that the administration of iodide of potassium for the purpose of causing the removal of hyperplastic connective tissue is without the slightest warrant unless perchance the condition be due to syphilis, in which the drug does good, not by removing any connective tissue already formed, but by modifying the disease and so preventing the further progress of the hyperplastic condition.

Dr. Peabody's article is evidently written from the standpoint of one who having had large experience recognizes the fallacies and strong points of therapeutic procedures, but we think that he has tinctured it unduly with therapeutic pessimism, and as we have said before, some of his statements which seem no doubt the value of well recognized therapeutic procedures are open to criticism. On the other hand, it is well for physicians to know their limitations as well as their possibilities, and Dr. Peabody's article helps them to this end.

The Cash Value of a Finger.

The following is taken from the Medical Record:

A provision merchant by ill-chance happened to scratch the second finger of his right hand on a nail projecting from some part of a haddock-box. On April 14th, 1900, he consulted his private medical attendant, in Leigh, five days after the accident. The physician *prescribed* (according to reports of the case) for him. On May 18th the digit had to be amputated; *i. e.*, thirty-nine days after the scratch. The merchant then claimed £500 damages from his physician for professional negligence. The judge who first heard the case in the Lower Court dismissed the action, but on appeal the Higher Court decided that there were grounds for it going to trial. Before this, however, the defendant settled the case by payment of £100 and expenses. As reported the important facts in the case *non sunt*. The doctor explained that his work after his first interview with the pursuer had had to be delegated to another physician, owing to his own ill-health. No note is giving of how the pursuer acted up to instructions, if he committed indiscretions, &c. An instance of personal application might well be noticed here. The writer was summoned to a club official, the greater part of the top of whose left index finger hung by only a narrow band of skin to the proximal portion of the digit; the nail crushed and crumpled, but the terminal phalangeal bone only bruised, not broken. These injuries were due to a crush between a door and its jamb. The detached portion was pulseless, insensible, bloodless; the terminal phalanx devoid of periosteum over a part of the surface. The method of treatment followed consisted in trusting to nature. The various bits brought together after their surfaces had been "dabbed" only with 1.40 carbolic, covered with protective, protected with dry antiseptic cotton wool in excess, and the hand and arm supported by a sling. The questions at issue were mainly: "Is it possible to preserve the vitality of the bruised and torn fragments? Which is of greater importance:

Rendering the wound aseptic, or endangering the vitality of the half-separated portions by the use of antiseptic agents?" Now, if this incomplete and theoretically inefficient cleansing of the wound had been followed by septic condition, the judgment of the exponents of legal empiricism would probably go against the adviser of such a plan of treatment. If succfssrul, as was the case just mentioned, no fault would be found, although the measures adopted in each event were the same. It is most common to meet with instances among doctors in which a finger, or part thereof has had to be amputated owing to their too faithful adherence to antiseptic rules, to the death of tissue caused by too forcible bactericidal measures, and ignorance of the fact that antiseptic agents employed in even slightly too concentrated a form may kill more than bacteria, and result in more harm than benefit. Each case of crushed or poisoned fingers or toes differs in character and detail. The result in such cases physicians or surgeons must needs strive for, consists in the attempt to save tissue. If vitality be so low that the action of antiseptics will possibly destroy the diseased or injured part, trusting to nature may be quite successful. Should this fail. the end is one and the same—the knife. How, then, can anyone judge, especially in the absence of emergency, the motives which may lead to the adoption of one or two courses, when it is apparent that either of them may fail, either may succeed, either seem to be unsuitable, or either to be warranted? Cases belonging to the category usually impose most unmerrited hardships upon medical men. How can they explain that they prefer expectant methods, and have obtained good results from them to the more official, up-to-date measures, in dealing with certain cases? This argument is logical, full of common sense; the chances of continuance of vitality in severely affected tissues, when reliance is chiefly placed upon the recuperative powers of nature, are often better than after a routine application of antiseptics from a too conscientious regard for the fashionable usages of the day.

Hereditary Transmission of Acquired Immunity.

The Philadelphia Medical Jonrnal says; probably one of the most important problems confronting the bacteriologist is that of immunity, a problem which so far seems to baffle all efforts at a satisfactory solution. We know that the manifestations of immunity are, but as to the whys and wherefores we are still in the domain of theories which at best are only plausible hypotheses. Immunity is usually divided into natural and acquired; the latter again into active and passive. So far as the immediate effect on the individual is concerned, both natural and acquired immunity are alike in protecting him against infection, but there is a sharp dividing line between the two, indicating that they are distinct biological phenomena. Natural immunity is racial and transmitted from the parent to the offspring, while the acquired is confined to the indiuidual, and may be transmitted in the form of a passive immunity which is but of brief duration, from a few days to 2-3 months. Accepting Weissman's theory that acquired characteristics are not transmitted, we can well conceive how acquired immunity, being an acquired characteristic, dies with the individual. On the other hand, natural immunity owes its existence to the survival of the fittest, an evolutionary process by which the individuals susceptible to a given infection are gradually eliminated. The passive immunity conferred upon the offspring by the immunized parents has been observed by Wernike in the case of diphtheria, Ehrlich in the case tetanus, and a number of other investigators. It has also been noted that the immunity is transmitted by the mother, but not the father. Experimental proof, as well as an explanation of this phenomenon, is found in a recent contribution to the Archiv. Biologitcheskich Nauk (Vol. VIII., No. 3) by C. K. Dzershgowski. This author found that the testicular fluid of a horse possessing a high degree of active immunity,is practically devoid of antitoxin. On the other hand, the fluid of the Graffian folicles of immunized mares is very rich in antitoxin, equalling in some instances the blood serum. Similarly, the secretions of the prostrate and Cowper's glands are very poor in antitoxins, while those of the uterus are but slightly inferior to the antitoxic serum. The fertilized ovum, therefore, is constantly surrounded by an antitoxic medium and is consequently subjected to a process of passive immunization. This, however, is possible only up to the time of the formatian of the placenta, for as soon as the direct interchange between the mother and embryo ceases, owing to the intervention of the placenta. the antitoxin no longer penetrates the tissues of the developing ovum. Experiments performed by the author shows that neither the placental blood nor the amniotic fluid contains any antitoxin. Moreover, the remarkable fact was established that the placenta has a selective action, permitting neither toxins nor antitoxins to filter through. Any immunity, therefore, that

the offspring of an immunized mother may possess is due entirely to the passive immunization acquired during the preplacental period.

The Unreliability of Public Statistics.

The following editorial is taken from the Philadelphia Medical Journal:

We have on previous occasions called attention to the comparative valuelessness of the vital statistics as published by some Boards of Health on account of the want of uniformity, and lack of precision in nomenclature. Of this a cogent instance will be found in the figures published by the Philadelphia Bureau of Health for the week ended June 29th, and there is no reason to believe that the statement for this period differs in character materially from that of other periods. Taking the report seriatim, we find, for instance, that 18 deaths are ascribed to apoplexy. Now apoplexy is merely a symptomatic designation, and it may result from several causes, the principal of which are cerebral hemorrhage, embolism, and thrombosis, but there are other causes, such as uremia, that may be attended with sudden loss of consciousness, with muscular relaxation or convulsions. Further, paralysis is made responsible for 8 additional deaths, softening of the brain for 4, and disease of the brain for 1. One death is attributed to atheroma, a disease of the blood vessels that may result in rupture or thrombosis and local necrosis, but per se it is scarcely a cause of death. One death is, in fact, charged to gangrene, and three more to arterial sclerosis. Four deaths are attributed to Bright's disease, 21 to convulsions, 3 to dropsy, 27 to inflammation of the kidneys, 1 to edema of the lungs, 12 to uremia. Bright's disease must be considered synonymous with nephritis, of which both dropsy and uremia, possibly with convulsions, are common manifestations, and to which, or to disease of the heart, edema of the lungs may be due. One death is charged to cholera and 20 to cholera infantum. Probably cholera nostras is meant by the former, as we have no knowledge of the existence at present of Asiatic cholera in this part of the world. "Disease of the heart" is responsible for 26 deaths, fatty degeneration of the heart for 3 besides, and inflammation of the heart for an additional 1. "Inanition" is charged with 17 deaths and "marasmus" with 10. We appreciate the difficulties of establishing a nosology that will at once meet all of the requirements, but we think we have clearly shown the need for a revision of the method of classification at present followed by the Philadelphia Bureau of Health.

The Fight Against Tuberculosis

Accorditg to the British Medical Journal the address delivered by Professor Koch before a general meeting of the British Congress on Tuberculosis will doubtless be read with immense interest in all countries of the world by medical men who have been unable to be present. Amongst the many important points raised the foremost is certainly still open to controversy, and will doubtless give rise to much discussion. This is, no doubt, what Professor Koch desires, and he indeed suggests that his experiments should be repeated and his results tested. In the clearest manner possible he tells us what he has found, and sums up his reasons for believing that the bacilli of human tuberculosis are in some of their vital characteristics and in their pathogenic qualities, distinct from the bacilli of the bovine disease, even if in appearance and staining reaction they seem to be identical. The results of inoculation of small and very susceptible animals, such as guinea-pigs, do not, he contends, give trustworthy results. Professor Koch by his experiments during the past two years on young cattle, swine, asses, sheep and goats, has arrived at results which he considers absolutely conclusive. He found these animals to be practically immune to the bacilli of human tuberculosis Young cattle were affected by the living bacilli as they would have been by dead ones, whereas the severest tuberculous disorders resulted when the experiments were made with bacilli from cases of bovine tuberculosis. In regard, however, to the insusceptibility of man to the bovine diseases the evidence brought forward is much less conclusive. Granted that cattle are almost immune to infection from man, may not human infants, if not adults, react like cattle towards the bacilli of bovine tuberculosis? Professor Koch's conclusions were in fact challenged at the conclusion of the address. Lord Lister, who was in the chair, after pointing out that if Professor Koch was right, prevention would be greatly simplified, said that though his evidence that human tuberculosis was not communicable to man seemed very conclusive, yet the evidence for the converse proposition was conclusive. Professor Nocard, of the French Veterinary School at Alfort, deprecated any attempt to deny the existence of danger of communication of bovine tuberculosis to man, and said that veterinary surgeons were not infrequently inoculated accidentally.

The question is admitedly most important from the practical point of view. The importance of securing milk and food absolutely free from the living bacilli of bo-

vine tuberculosis may have been overestimated, but this zeal can have done nothing but good, and we believe that Professor Bang, of Compenhagen was right in advising that the precautions at present employed should not be relaxed until quite certain proofs of the correctness of Professor Koch's views in this respect are forthcoming. In cases of human intestinal tuberculosis, if pure cultures of the tubercle bicilli found in the tuberculous material are made, it can then be ascertained, he states, by inoculating cattle subcutaneously with them, whether the microbes are derived originally from bovine or human tuberculosis. Professor Koch, however, does not tell us how it has been proved that bacilli derived originally from bovine tuberculosis may not be so altered by their growth in the human intestinal wall that when afterwards injected subcutaneously into cattle they may behave rather as bacilli from human than bovine tuberculosis. Moreover, it is very far from proved that a primary tuberculosis of the intestine is necessary before the mesenteric lymph glands can be infected from the intestinal contents. The suggestion made by Professor Sims Woodhead that the British Government should take steps without delay to put this question to the test of actual experiment will meet with general approval.

Whatever the results of future experiments in this direction may be most pathologists, we believe, will agree in regarding human sputum as the chief vehicle of tuberculous infection amongst the human race. In regard, therefore, to means likely to diminish the spread of the disease we are brought to the much-discussed subject of spitting. The modern education of consumptive in-patients at hospitals and sanatoria, and the printed directions distributed in out-patient departments show patients how they may avoid infecting their relations and friends. In some countries concise and clearly-written notices as to the nature of consumption and how to prevent the disease from spreading are posted in public places, such as the waiting rooms, and platforms of the Baden railway stations. In short, general hygenic knowledge in regard to the nature and prevention of tuberculosis is being gradually published amongst all classes in civilised countries. Yet it is not likely that infection by sputum can be suppressed so long as it remains the popular custom for persons, healthy or unhealthy, to spit in omnibuses, in railway carriages, and on the floor of waiting rooms, etc. In London street spitting has scarcely diminished of late years. Anyone can convince himself of this. Passengers spit from the tops of omnibuses with little regard to where the spray goes. With a slight wind a shower of spray is often carried on to the faces of fellow-pas sengers.

The disgusting lumps of muco-pus to be seen on the London pavements and roads tell us how likely any woman is to return from her shopping with her skirts laden with tubercle bacilli. It is true that in the carriages of the Centeral London Railway there are large and conspicuous notices against spitting, but these should be equally conspicuous on platforms and the stairs, where the currents of air are often strong enough to carry microbe-laden dust about. Quite recently at a meeting of the German Society for Popular Hygiene in Berlin an energetic protest was made by influential medical men against the spitting nuisance; and parts of America have had the courage to boldly attack the popular custom Perhads it is because England has never rivalled these countries in the spitting habit that she now seems to lag behind in getting rid of such a dangerous and disagreeable public nuisance.

Professor Brouardel, likewise, in his address printed in the British Medical Journal, raises his voice against the deplorable custom of spitting. Once this habit has quite disappeared, tuberculosis will, he thinks, decrease rapidly. He insists on the great importance of the improvement of workmen's dwellings by Government and municipal control, and by the formation of building societies; in every town there are groups of dwellings constituting hotbeds of tuberculosis, which must be sought out and demolished. In regard to the alcohol question, on which Professor Brouardel lays great stress, it is probable that while alcoholism is certainly a predisposing cause of pulmony tuberculosis, yet the mortality from other pulmonary diseases is relatively more increased through intemperance even than that from tuberculosis.

Professor Koch spoke strongly as to the great need of hospitals for the consumptive poor, hospitals to which the bad cases, those cases unsuitable for sanatorium treatment, might be sent. Such patients constitute the most infectious class, since they generally eject copious expectoration, often swarming with tubercle bacilli. It is true certainly that many of these cases are received into infirmaries, and into the wards of general hospitals, in this country, but many remain in their own poor homes, where they are of necessity wretchedly cared for, and constitute a terrible source of danger to those who live about them.

In regard to the modern sanatorium move-

ment, Koch allows that by careful selection of cases it will be possible, if the duration of treatment be prolonged, to cure 50 per cent. of patients, or perhaps still more. The total effect, however, he is convinced, will always remain moderate. Be this as it may, it must in fairness be remembered that it is largely owing to the sanatorium movement that the present great international interest in the tuberculosis question has arisen. To the managers of private sanatoria, though they have by some been slightly compared to hotel keepers or hotel managers, is due much of the credit for the great advances which have been made during recent years in our knowledge of the whole subject of the treatment of consumption. In the struggle against tuberculosis the importance of improving the general health of weakly children of the poorer classes by the establishment of charitable seaside sanatoria and holiday colonies, as referred to by Professor Brouadel and Sir Hermann Weber, cannot be overlooked. This is, indeed, a timely method for rendering the human soil unsuitable to the bacilliary growth.

Koch draws special attention to compulsory notification as one of the methods for checking the spread of tuberculosis. All must be agreed on the urgent necessity of disinfecting the rooms in which patients dying of consumption have spent the last days of their life. Amongst the poorer classes disinfection can never be systematically carried out until there is notification of all consumptives who are a source of infection to others by their expectoration. The hotels and villas at health resorts frequented by consumptives, as well as the trains by which such patients mostly travel, should be regularly visited by Government inspectors, whose duty it should be to enforce adequate disinfection. Surely likewise it would not be too much to demand that candidates for employment on railways and all passenger steamship lines should be medically examined and certified as free from signs of tuberculosis before they are accepted. We have reason to believe that tuberculous patients are sometimes accepted as stewards or stewardesses on passenger ships, though adequate arrangements do not exist to prevent the spread of the disease by the sputum in such cases. As Professor Brouardel points out, for the safety of all concerned, every house where tuberculous patients are received ought to be open to State inspection; the disinfection of railway carriages, steamboats, and hotels, would be of truly international import.

Dr. Koch does not specially allude to universal insurance of the working classes as one of the means for opposing tuberculosis. In our opinion, as we have explained in a recent issue, such a scheme of universal insurance would greatly facilitate the provision of adequate hospital and sanatorium accommodation, and it would also help in instructing the people. That it would make notification easier is certain. Whence would the money be derived which would be required for such a colossal Government scheme in England? Very little of it would really come from the working classes; almost all in reality would have to be provided by the employers of the labor and the tax-paying public generally. This does not sound pleasant, but it may be asked would the public have really to pay more than it does at present? To this in a sense we can certainly answer "No." Even under the present system nobody fails to obtain medical or surgical aid when he requires it, nobody starves, and beds are provided for the infirm who can no longer work. The money for most of this is actually provided by the tax-paying public, partly indeed in the form of charitable contributions. The methods by which the poor are at present relieved—that is, by the existing Government and charitable institutions—involve enormous waste, which could be partly obviated by centralization of present hospital and charitable relief, and would be still further diminished by universal insurance of the working classes. The latter plan would, probably, effect a saving of money to those who pay for the poor, and would relieve and morally elevate the poorer industrial classes themselves.

Pure Milk.

There are many terms used to express the different varieties of milk sold to a community. We have what is known as "good milk," "blue milk" and "blue water." There is no food that requires closer inspection than that of milk. New York authorities have recently prosecuted several milk supply houses for selling impure milk. This should serve a good purpose in calling the attention of other cities to the great importance of getting good milk. The rich do not suffer because they can pay a fancy price and get "milk," but it is the poor who suffer. During the heated term every quart of milk sold should undergo official inspection.

"I presume you carry a memento of some kind in that locket of yours?" "Precisely, it is a lock of my husband's hair." "But your husband is still alive." "Yes; but his hair is gone."

MISCELLANEOUS.

The Treatment of Coughs in Tuberculous Subjects.

The results obtained in sanatoria tend to show the advantages of dealing effectively with cough in cases of pulmonary tubercle. Lalesque, of Arcachon, records his experiences (Journ. de Med. et de Chir. Pratiques, April 25th, 1901.) He shows that in very many cases the patients contract a habit of coughing as soon as they have a tickling or irritation of the fauces, larynx, or trachea. Such cough is likely to be spasmodic, irritating, and unaccompanied by expectoration. It differs completely from the expectoration cough which has as its object to get rid of accumulated secretion. A very common method of treatment in the former cases is the administration of sedatives. This is a method which the writer condemns in the strongest terms. He shows that it is quite possible to drill the patient into the manner of not giving way to the sensation produced of cough, and with practice he shows that it is quite possible to avoid all such spasmodic attacks which have as their result fatigue, perspiration, cerebral congestion, possibly vomiting. He states that it is as easy with a little practice to avoid coughing as it is to avoid scratching in public. In many cases the patients require encouragement combined with firmness on the part of the medical attendant to enable them to overcome this very injurious habit. The writer also demonstrates that failure may be due to some fault in the directions to the patient. He is not to close his mouth and hold his breath in the hopes that the desire to cough may pass off. Such a result is likely to be followed by a sudden severe cough. The best method is to close the mouth gently, and take three or four quiet deep respiratory movements through the nose. As regards expectoration cough it is also shown that it may be unduly excessive on account of effort on the part of the patient to expectorate mucous material which is as yet undetached. The patient should be instructed to avoid coughing prematurely, and a little practice will soon enable him to recognize when expectoration may be brought about by a single cough. This may prevent a great deal of tiring effort which can not but prove injurious to the tuberculous patient.—British Medical Journal.

Chorea and Rheumatism.

"Chorea is rheumatism of the brain, and I feel as certain of that as I do of anything in medicine." These are the words used by Sir Dyce Duckworth in addressing his students at St. Bartholomew's Hospital a short time since, and in support of his view he was able to add that the recent researches of Drs. Poynton and Payne have rendered his conception as nearly certain and positive by way of demonstration as anything can well be. These two observers have succeeded in inducing chorea in the rabbit by inoculation of the diplococci of rheumatism, and they have detected these diplococci in the endothelial cells and capillaries of the brain. They found them not only there, but dipping into the motor centres of the rabbit's brain. That is almost as complete and perfect a demonstration of the nature of the disease as could be wished for, but Sir Dyce Duckworth was singularly fortunate in being able to quote an extremely interesting case of fatal chorea in the human subject, in which Drs. Poynton and Payne discovered these rheumatic organisms in the mitral valve and also in the motor cortex of the brain. The very natural conclusion these gentlemen have drawn is that chorea is induced by the presence of these diplococci or of the toxins which they produce in the brain. It would be difficult to describe the modern view of the morbid anatomy of chorea more concisely and clearly than Sir Dyce Duckworth, who says that so far as it has been studied it shows nothing incompatible with the theory that it is an inflammatory process depending on microbic invasion, and the symptoms of the disease appear to indicate that the changes are caused by multiple local lesions due to the deposition of a particular form of disease rather than to any diffuse toxæmia. Believing that the determination of this process to the brain will only occur in persons particularly and specifically predisposed to brain weakness, we naturally come to regard it as rheumatism localized in that organ.—Medical Press and Circular.

Pernicious Anæmia.

Th. Rumpf (Berl. klin. Woch., May 6th, 1901) publishes the results of his analyses of blood in cases of pernicious anæmia. He first turns his attention to the etiology of the disease. He can only explain the disease by looking on it as a combination of symptoms due to various causes. Of these he mentions bothriocedhalus latus in the intestine—a very rare cause—carcinoma, specially of the stomach, pregnancy and parturition, syphilis, insufficient nutrition, and pathological conditions of the gastro-enteric canal. Besides cases due to or following one of these conditions, he calls attention to those cases for which no cause can be ascribed—cryptogenetic pernicious

anæmia. (Birch-Hirschfeld). He says that just as ill-understood as the etiology of the disease is the actual condition of the blood. The microscopical appearances are well known, but the true chemical changes have almost entirely been neglected. He conducted experiments with Dennstadt. They examined the blood of two stillborn fœtuses as a control, and further compared the results with those obtained by Schmidt and other analysts. They found that the blood in pernicious anæmia contained a larger quantity of water than normal blood, a smaller quantity of solids, a higher proportion of chlorine, and a lower proportion of potassium, iron, and fat. The deficiency of potassium is more evident when a comparison is made with the quantity of sodium and chlorine. In pernicious anæmia there is not sufficient sodium to "cover" the chlorine, and the potassium also is present in too small quantities to combine with all the free chlorine. In normal blood there is an excess of sodium when estimated by the side of chlorine, without any of the potassium being needed to take up the chlorine. They further examined various tissues of the body, and found that the proportion of water was higher than nomal in the heart, but considerably lower in the liver, spleen, and brain. The solids were in excess in the heart, and especially in the liver and spleen. There was also a deficiency of sodium to cover the chlorine in the liver and speen, while in the former potassium was present in a higher proportion than normal, and in a lower proportion in all other organs. Making his deductions from these investigations, he turned them to practical use by treating pernicious anæmia with potassium carbonate, tartrate, and citrate. He reports 4 cases, 3 of which he described as dying when he began the treatment; all recovered. A fifth case was improved, but as he did not continue the treatment for a sufficiently long time, Rumpf does not include that in the trial cases. The patient relapsed later and died after two months' further illness. He does not claim that potassium salts are a true specific remedy for all cases of pernicious anæmia, but strongly recommends that a trial of the treatment should be made.—*British Medical Journal.*

The Newspaper as a Pathological Factor.

A newspaper in an Eastern city changed hands about July 1, and the new proprietor, who has a large practical experience in legitimate journalism, at once formulated a set of rules for the conduct of the paper under its changed management. Among the rules were the following suggestive prohibitsons: "No medical advertisements"; no advertisements that a self-respecting man would not read to his family; no advertisements of immoral books, of fortune tellers, of secret diseases, of guaranteed cures, of clairvoyants, of palmists, of massage; no advertisements of offers of large salaries, of guaranteed dividends, of offers of something for nothing; no pessimism; no prize-fighting details; no personal journalism; no private scandal. Here is a program that involves the removal of most of the objectionable features in so-called modern journalism. If its details could be conscientiously carried out for newspapers, medical men would find less objection than at present to the promiscuous reading of the daily press, which is working such great harm. Two prohibitions should be added to the list; no details of suicides; no details of homicides, especially such as are committed under circumstances that point to the mental disequilibration of the active agent in the tragedy. If the prohibitions were faithfully kept we should have many less suicides and murders, since often the imperitive idea that leads to their committal is suggested by the reading of these cases. How important the influence of such stories is on the mentally unbalanced, can be best realized from the fact that crimes of peculiar heinousness occur in groups. The time relation of these groups, taken in connection with their inevitable recurrence, shows that they are not mere coincidences, but are due to the rigid principle of cause and effect. It has been said that it is impossible to correct the sensational defects of the modern newspaper. A distinguished dramatic manager, when asked where he would begin if he wished to reform the American stage, said that he would begin with the audiences. This principle will apply to journalism. We shall have cleaner newspapers when readers demand and support them. Meantime, much can be done to raise the standard of taste among newspaper readers. So many of the prohibitions that should be enforced in the make-up of the daily newspaper have special reference to health matters that it is evident that medical men should take a lively interest in the subject. It is a duty of the physician to try to secure the suppression of the objectionable advertising matter that is flaunted in the faces of readers and that does so much moral and physical harm.—Journal of the American Medical Association.

Cæsarean Section.

The advance of medical science has enabled the practitioner of to-day to discuss

with no uncertain mind the proprietary and safety of delivering by Cæsarean section a woman at term who wishes for a living child, but on whom the induction of early labor at the proper time has not for some reason been practiced, and in whom the pelvis is too small to allow a living child to pass at term. It is certainly a sign of the modern trend of thought that Professor Sinclair, of Manchester, should have chosen the present time for delivering "A Plea for Cæsarean Section" at the London Polyclinic, on June 26th. Very notable attention was paid by the audience to the lecturer's description of his last case of Cæsarean section, which, he stated, was the first operation of the kind that had been done without a general anæsthetic since the introduction of chloroform, local anæsthesia being procured by the injection of solution of cocaine. It took only five minutes for the patient to become absolutely anœsthetised from the waist downwards. She was blindfolded and cotton-wool put into her ears so as to avoid anything being seen or heard by her to cause shock, and a nurse stood by her side to comfort her during the progress of the operation. The patient complained of no pain and simply asked for a drink. The reason for employing cocaine in this case was because the patient had a dilated heart, and had been the subject of bronchitis for many winters previously. It is possible that the place of chloroform may be taken by this method of injecting cocaine to secure local anæsthesia, and the particular woman, whose case was commented on by Professor Sinclair, did very well and made an excellent recovery despite the fact that she was a somewhat elderly primipara, aged 39. It must be admitted that one of the causes of fatal endings in the operation for Cæsarean section is the injudicious interference previous to the operation, and also, to quote Professor Sinclair again, the want of a fixed resolution as to a definite and distinct line of action and early diagnosis of the condition. After this early diagnosis there should be prompt and decided action. The most hazardous course that can be followed in these cases is to finally resort to Cæsarean section after futile delay and objectless shilly-shallying, taking up one plan only to give it up for another, and generally exhausting the vitality of the patient.—Medicall Press and Circular.

Railway Hygiene.

The number of railway passengers has increased from 73,000,000 in 1850 to 1,107,000,000 in 1900. Until a few years ago the different railway companies seemed quite indifferent to the hygienic condition of the vehicles they provided for the public. In some few instances passengers who suffered from the effects of long retention of urine and so forth obtained good damages, and it was found to be in the interests of the shareholders to provide proper lavatory accommodation. Competition was also a factor in producing more roomy carriages, better ventilation, an improved system of warming the coaches, and seats framed more for comfort than torture, which seemed the former rule. Thus the more glaring defects were got rid of, and it became possible to travel third-class in comparative comfort. But even now railway traveling implies many risks from the unhygienic conditions of many of the carriages of every class. The loathsome and dangerous habit of spitting on the floor of carriages is still practiced, and in the evening of the day many third-class carriages becomes filthy from the habit. There is no systematic cleansing of the floor of such carriages on the completion of each journey as there should be. If the habit of spitting in trains cannot be put down suitable spittoons should be provided. We think that in all trains a special carriage should be provided for invalids; at present the wealthy invalid traveler may experience little inconvenience on his journey, but it should be possible for the man of limited means to secure a couch, or bed, and some little extra attention on his journey. Railways are our common means of transit, the great powers conferred on the companies have practically placed the travelling public at their mercy, and companies ought to remember that they have duties as well as their rights. But over and above all these details reform is required, especially in saloon and first-class carriages, of which the thick carpets, brushed daily, impregnate the cloth-covered cushions, the depressions made by the buttons, the crevices between the seat cushion and the back cusion with all manner of foulness carried on the feet of travelers from the streets to the platforms. A quick, sharp brush, which is all they get from the whisk of the railway porter.—Medical Press and Circular.

Bathing Fatalities.

The advent of the summer season has been ushered in with even more than the usual list of bathing fatalities. Of such accidents there can be no doubt that a great many are preventable, that is to say, they should not occur under conditions of ordinary prudence. The number of persons who are drowned every year because they cannot swim is simply appalling. With regard to swimming it need hardly be re-

marked that in addition to being a most desirable acquirement it is a delightful and health-giving exercise, which brings grace and vigor to the body. To swim, however, especially in rough water is an extremely athletic exercise, and cannot be undertaken lightly by any person who is not more or less in that state of bodily fitness known as "training." The majority of bathing accidents probably happen to those who overtax their muscular resources too suddenly and too severely directly they get down to the seaside. Another risk arises from too frequent bathing. Only a few days ago an inquest was held on an ex-champion diver and swimmer who had tempted fate by swimming in the Thames several times in a single day. The fact is that those who contemplate seaside or inland bathing would do well to consult their medical attendant beforehand upon the matter. Many a man and woman with weak heart and feeble circulation, or with flabby muscles would thereby be warned against incurring unnecessary dangers. This sort of warning cannot be picked up from books, but may always be obtained from the ripe treasury of sagacity that is gathered by the practitioner from the broad harvest fields of medical practice.—Medical Press and Circular.

New Cases of Plague in San Francisco.

Bubonic plague has again broken out in San Francisco, four cases having already been reported. The first case was that of a Chinaman, who died July 6th. It is reported that he arrived in San Francisco a few days before from one of the lower islands on the Sacramento River, and that he was ill when he reached the city. An autopsy was performed and diagnosis of bubonic plague was verified by bacteriologic examination. After the death of the Chinaman three more deaths were reported. These were Japanese women who were living in a brothel on Stockton Street, in the Chinese section of the city. Bacteriologic examination confirmed the diagnosis in two of these; the result of the third had not yet been reported up to the writing of this note. Two of these cases were ill with the disease a week before the Chinaman landed in San Francisco, so they have no relation to that case. Another case is reported among the Japanese women, but not confirmed. This seems to be a new outbreak, as no new cases have been discovered for three months, the last case reported by the Marine-Haspital Service being April 4. The local and State boards of health seem to be working more in harmony now than during the former outbreak, and in unison with the Marine-Hospital Service. The cleaning of Chinatown was completed June 22, but inspection and postmortem examinations of Chinese have been continued under direction of the Marine-Hospital service.—Journal of the American Medical Association.

The Earliest Signs of Tuberculosis.

Prof. Bozzalo, of Turin, in a paper read at the recent International Congress of Tuberculosis at Naples, has conveniently summarized the following 11 important points which are of assistance in forming a diagnosis of pulmonary phthisis in its earliest stages. They are: 1. Albuminuria alternating with phosphaturia. 2. A psuedochlorosis distinguished from true chlorosis by the slightest degree of reduction of the hemoglobin and the less-marked vascular and cardiac disturbances (palpitation, soft pulse, pulsating arteries, etc). 3. The presence of gastric disturbances, like gastralgia, anorexia, nausea, and vomiting. 4. Tachycardia in the absence of fever. 5. Diminution of blood-pressure. 6. A rise of temperature following bodily or mental exertion above the slight rise proper to health. In women a rise of from 0.3 deg. to 0.4 deg. C. is observable before the onset of each menstrual period. 7. An undue tendency to sweat after exertion, mental or bodily; also night-sweats. 8. Pain in the supra-orbital regions and in the neck. 9. A slight inequality of the pupils with a tendency to dilatation (mydriasis). 10. The occurrence of herpes zoster. 11. Enlargement of the spleen. Of these, the first seven symptoms are the most frequently met with and possess considerable diagnostic value. —Lancet.

Intestinal Obstruction.

Marylard believes that in intestinal obstruction the primary operation should be Nelaton's, modified as follows: The wall of the gut presenting at the parietal incision is secured by a stitch above and below, and a pursestring stitch is made to enclose an area of bowel sufficient to allow the insertion of a glass drainage-tube. This makes the escape of intestinal contents impossible. He has devised a tube with a short arm near the proximal end for cleansing purposes. When the patient has been thus releived, an exploratory laparotomy may be done. The two methods of short-coming by lateral approximation and union, and lateral implanation are described. The latter is advised in malignant disease, and the former when there is a possibility of the digestion of small quantities of chyme in the partially obstructed area. Short-circuiting is the preferred operation for divert-

ing the feces from an artificial anus or fistula. Stitching alone should be employed, as such mechanical agents as Murphy's button may become plugged with feces, as happened in one of Maylard's cases. The two portions of gut should be so approximated that the downward current of the feces is maintained. In implanting the free end of the ileum in the colon it is well to invaginate it for half inch. This is done by passing a traction stitch through the patent end of the ileum, and after transfixing the colon at two inches or so with the needle carrying the thread pulling on the latter. It is then carefully stitched all around with a double circle of Lembert's sutures.—*American Medicine.*

Status of Menstruation.

Menstruation is not, as has been supposed, a special function of the generative organs of women, but only the perverted counterpart of the estruation of the lower animals. This transformation into a monthly "hemorrhage" (menorrhagia) has generally been brought about by the necessities and results of the social, moral, and connubial life of mankind, as well as through the transmission by inheritance of certain debilities of the generative apparatus, and more especially by the erect position and its natural consequences assumed by the human species. This fact being admitted, the profuseness and prolongation of the sanguineous loss is a proof that it is now a physiologico-pathologic condition, predisposing to anemia and all its direful consequences pre-eminently to the nervous system. In the great majority of cases the quantity of blood lost during so-called menstruation is an unnecessary and therefore pathologic waste of the very essence of life. It stands to reason that in all cases of depressed vitality this loss should be reduced as much as possible and by all means of disposition. The best means for controlling the waste is the vaginal (not uterine) tampon, applied *secundum artem.* Whenever curettage is not indicated or applicable, and where it has failed in gaining the desired result, the tampon is the means indicated. Chronic and acute inflammations of the pelvic organs are contraindications. Unless the restriction of the waste is put in execution, tonics are useless, because they simply increase the pressure and consequently the waste, while after the repression, or simultaneously with it, they seem to work wonders. The superstitions surrounding menstruations, as well as the misunderstanding of its true character by the medical profession as well as the public, have caused a world of trouble and suffering by the neglect of the necessary advice and treatment.—*E. C. Gehrung, American Journal of Obstetric.*

Diagnosis of Latent Malaria.

Grixoni points out that the prophylaxis of malaria now depends on the thorough cure of cases in the cold months, so that the Anopheles may may not become infected in summer. To make sure of a thorough cure latent malaria must not be overlooked, and a rapid and certain method of diagnosing it will be of great scientific value. The author experimented on the known property of malarial blood to produce agglutination of the red corpuscles. If two drops of malarial blood (or one of malarial and one of healthy) are placed on cover glasses and then brought into contact and closely pressed together to get a uniform layer, in less than a minute the red corpuscles group themselves into masses of from 3 to 5 up to 80 to 100 or more. The leucocytes take no part, and if they are included in one of the masses they are surrounded by a zone free from cells, as if they exercised a negative chemiotactic force. The ordinary roulette arrangement is never met with in a well-made malarial preparation. In 7 patients who had been free from malarial attacks for periods of from one to six months and were in good health, the blood still had this agglutinating power. In 3 of them which entered the hospital for non-malarial febrile complaints, after a few days of fever without any parasites, fever of the old malarial type recurred and parasites were then found these attacks occurred when there were no mosquitoes about, and so were true relapses and not reinfections. The author believes that the agglutinative power is not merely the survival of the former state of the blood, but represents a continuous production in minute quantity of the agglutinating substance by organisms existing in the body. Not only does the return of the malaria in these 3 cases point to this, but also the fact that in bad and old-standing cases energetic treatment will cause the agglutinating property rapidly to disappear; if this property can rapidly disappear in some cases, its persistence in others is probably due to its continuous production. So that the pnenomon of agglutination serves to diagnose latent malaria which invades all other diagnostic methods. By dilution of the blood with normal saline solution an approximately quantitative estimation of the agglutinative power was obtained, and thus a very marked action of quinine was demonstrated. In subcutaneous administration the maximum effect was reached two hours after the dose, and was maintained for seven to eight

hours; in the case of doses by the mouth the maximum was reached after four hours, and lasted about five hours more. By the same method, a slight diminution of agglutinative power was detected towards the end of the interval in patients with fever of a long period, but no such change could be detected in tertian or quartan cases. A large series of experiments was made in other febrile diseases (measles, varicella, erysipelas, mumps, syphilis, typhoid, acute rheumatism, bronchitis, phthisis, lobar pneumonia, pleurisy—dry and exudatory—meningitis, tubercle of bones, abscesses, suppurating glands, febrile gastric catarrh, gonorrhœa, ankylostomiasis, and ephemeral fever). The only cases in which the reaction occurred were those of typhoid (in which it was constant, being specially marked when typhoid and malarial blood were mixed). In one case of streptococcus meningitis it occurred, but malarial history could not be absolutely excluded, and in severe cases of streptococcus erysipelas no agglutination occurred.—British Medical Journal.

Which End Forward? A Colored Porter's Philosophy.

You don't want to sleep with your feet toward the engine, because if you do the draught through the car blows right agin your head, and when it gets cold your head and chest are exposed. Put your head toward the engine and you feel cool without getting in no draught. It's just the same way in summer. If you sleep with your feet toward the engine you can't have your windows open, with the screen in 'em, without getting the wind and fine dust right in your face, whereas if you sleep with your head to the engine you get the cool air and no draught and dust.

But the most serious thing of all is the circulation of blood in your body. You have been having your feet made up toward the engine, eh? Well, I reckon you don't never sleep very well in the cars, do you? Your night's res' is usually broken, ain't it? Well, sir, lemme make up your head to the engine an' you'll sleep like you was a baby. Dat's because the motion of the train is so strong and steady that it sends all your blood toward the end that's furthest from the engine. Put your feet to the engine and all your blood rushes straight to your head and gives you a restless night. Put your head to the engine and the blood goes away from your head, leaving it cool so you can res' like a child. The safest place on a train is the middle of the middle car, on the side furthest from the other track.—*Diet. and Hygienic Gazette.*

The Most Active and Reliable Combatant in Uterine Disorders.*

I have used a number of remedies for the cure of Amenorrhœa, Dysmenorrhœa, and kindred ailments to which the female is subject, and have found in Ergoapiol (Smith) the most reliable and active combatants in Uterine disorders. After using it in my practice the past two years, I find it acts promptly upon the mucous membrane in delayed menstruation, in allaying inflammation and in dispelling pain. It acts very favorably upon the ovarian tract. A few cases in my own practice are here cited:

Case No. 1.—Miss T., age 22: Never having menstruated, although having full developed organs of puberty for seven years previous; found, upon examination, the uterine organs normal, no imperforate hymen. Had been operated upon for otorrhœa two years previous, which resulted in complete deafness. I prescribed Ergoapiol (Smith), two capsules three times a day for ten days, when a scanty menstruation appeared; continued for three months with Ergoapiol (Smith), four days before the menstrual period was due, when normal conditions resulted.

Case No. 2.—Miss D., age 23: Having Dysmenorrhœa and Menorrhœa at frequent intervals, was placed on Ergoapiol (Smith) giving six capsules daily for five days, when pain ceased; with three months' treatment normal menstruations were established, with no hemorrhages appearing between the periods.

Case No. 3.—Mrs. H., 23: Was left in a very anæmic condition following miscarriage, when Amenorrhœa followed, and was delayed for two periods. I prescribed Ergoapiol (Smith) one capsule three times a day, when normal menstruation returned, and weak system built up with no after-results.

Case No. 4.—Mrs. B., age 43: Was referred to me having irregular menstruation two or three times a month. Ovarian pains constantly, profuse and purulent Leucorrhœa. I had about decided to currette, when the condition of the heart dissuaded me, and resolved to use Ergoapiol (Smith) in large doses, when a profuse hemorrhage for seven days followed, evacuating large blood clots, relieving the patient to normal condition with no after-effect, and with subsequent treatment was restored to good health.

Case No. 5.—Miss B., age 16: Had commenced her menstrual period at the age of 12 years. Was in normal condition for three

*Extract from Clinical Report by E. Alfred Mallette, M.D., Philadelphia, Pa.

years, when she was attacked with typhoid fever, having no menstruations for three months. Being in a very anæmic condition, heart action was very poor. After prescribing tonics, I placed her on Ergoapiol (Smith), in small doses, one capsule three times a day, when in two months the regular periods were established without further complications.

Case No. 6.—Miss T.: Had normal menstruations since fifteen years of age. Became in a very anæmic condition through hard work and poor nourishment, etc., and passed her menstrual period for ten days. Prescribed Ergoapiol (Smith) until ten capsules were taken, when menstruation appeared, but with Dysmenorrhœa. On following the treatment for three successive months, the normal conditions were revived, no further trouble ensuing.

The Statistics of Medical Education in the United States.

Despite prolongation of the term of study, of preliminary entrance examinations, and of other requisites for eligibility, as well as of State examinations for the license to practice their chosen profession, not to speak of the increasing difficulty in securing a remunerative clientele, the number of medical students continues to increase. Thus, according to the Report of the Commissioner of Education for the year 1898-99, it appears that there were enrolled in 150 schools during this period 23,778 medical students, an increase of 345 over the previous year. These schools owned ground and buildings valued at $13,121,529, and had endowments valued at $1,422,373, while their libraries contained 130,922 volumes. One hundred and twenty-two of the schools were regular, 21 homeopathic, 6 eclectic, and 2 physiomedical. There were engaged in teaching in the regular schools 3,562 instructors, in homeopathic schools 636, in ecletic schools 131, and in physiomedical schools 60. Of the whole number of students there were enrolled in regular schools 20,338, men and 1,063 women, in homeopathic schools 1,487 men and 315 women, in eclectic schools 452 men and 48 women, and in physiomedical schools 65 men and 10 women. There were, in 1899, 4,314 graduates from regular schools, 433 from homeopathic schools, 152 from eclectic schools, and 12 from physiomedical schools. Of the graduates, 1,879 from regular schools, 193 from homeopathic schools, and 14 from physiomedical schools possessed the degree of A. B. or B. S. All but 15 of the medical schools giving full courses of instruction, reported having a course of four years, and some of the remainder were prepairing to enter upon such a course. In 43 schools the annual session continued eight months or longer, and in 12 of these the session continued for 9 months. It is pointed out that in several medical schools the time of attendance now required in one year is equal to the whole time of attendance required for a degree 20 years ago.—Philadelphia Medical Journal.

Calomel.

I regard calomel as by far the most useful drug I have ever used. If calomel does not act when it should, give an injection of glycerin or soap and water. When first called to any fever, give from three to ten grains of calomel and follow with a saline. Ten grains of calomel every morning for three days in typhoid fever is a good beginning, particularly if it is desirable to make the bill light. Always make it a rule when you prescribe calomel either to give it in large doses once a day or in small doses for a few hours only. Do not prescribe, say, one grain of calomel every hour until the bowels move, for twenty grains may be given in this way and salivation result. Small doses of calomel frequently repeated, say one-tenth grain every half hour until ten doses are given, usually succeed in promoting activity of the bowels. When called to an infant with 103 deg. to 106 deg. temperature, in your prognosis give a ray of hope, and in your treatment, saying the child is two years old, give three or four grains of calomel. It has been my practice never to give acids while giving calomel, but always to give carbonate of potassium or of sodium.—C. E. Boynton, Wisconsin Medical Recorder.

The Bacterial Treatment of Constipation.

Some recent researches of Roos, of Freiburg, into the bacterial treatment of constipation, deserve careful attention. He found that cultures of bacillus coli communis, derived from persons whose bowels were active, effected a cure when administered to persons suffering from constipation. His experiments were carried out upon himself and upon some half-dozen medical friends. Accepting the facts as stated, it follows that there is a difference in the activity and vital reaction of various members of the bacillus coli group. That many varieties exist in that particular family has long been an established fact In connection with this subject it may be pointed out that some observers have described a form of diarrhea associated with bacillus coli. Again, the origin of the more or less summer diarrhea has been

attributed to the pollution of town dust by the bowel bacteria of the horse. It would be not a little interesting to learn whether Roos has conducted his researches into the relation of the equine bacillus coli to the constipation of man. In any case he has opened up a most interesting and suggestive line of observation, and one that promises to yield practical results in the direction of treatment. The subject of the bacteriology of the intestine, both in health and in disease, is enormously wide and important, and offers a fine field of investigation to the rising generation of bacteriologists.—*Medical Press.*

The Plague.

Mail advices from the East brings news of a steady increase in the number of deaths from plague in Hong Kong, and report that the percentage of Europeans who have succumbed to the disease is much higher than on any occasion of former epidemics. The latest advices recorded the mortality in Hong Kong from plague at forty-five deaths every twenty-four hours, and the number of new cases at fifty a day. This disease appeared again at Oporto, the latter part of June. The Orient Line steamship, *Ormuz*, from Sidney for London, landed at Plymouth, July 22, two persons, supposed to be suffering from bubonic plague. One case developed after the ship had left Marseilles. A sailor on the ship *Hohenfels*, which arrievel at this port from Calcutta a few days ago, was detained at quarantine because of a suspicious illness accompanied by a glandular enlargement of the groin, and a bacteriological examination proved the case to be one of plague.—*Record.*

Flies as Carriers of Disease.

For forty years the writer has been struck by the fact that all animals hate flies with an intensity not explained by their suctorial or "biting" powers. Our domestic animals, expend as much energy in keeping off the pests as they do in our service, or in getting food. Even the most pachydermatous are no exceptions to the rule. If we observe an elephant, we are astonished at his constant watchfulness and exertions in keeping off the common flies whose suctorial powers are so feeble as to be utterly out of proportion to the energy spent. Might not bacteriology have got a hint here of service in discovering the etiology of disease? Did not nature long ago thus find out that flies might be the carriers of disease germs? Science is now advancing rapidly toward the same discovery.

The entomologist of the United States Agricultural Department, Dr. Howard, after long studies, believes that flies are often the active agents in spreading typhoid fever. The bacillus of Eberth has been found in flies, and if Dr. Howard is right, then the profession must educate the public and nurses, and so order hospital-construction and service that flies shall have no access to food.—*American Medicine.*

Unseasonable Diseases.

Smallpox, which is usually regarded as a winter disease, has prevailed to a greater extent in this city since the mild weather began than during the winter. During May and June there were over eight hundred cases, while from the middle of December to April 30, there were less than seven hundred cases reported to the Health Department. Owing to this rapid increase, with which the Health Department is evidently unable to cope, the Board of Estimate has authorized a bond issue of $65,000 in the hope that with this amount more can be done in vaccinating the well and isolating the sick. Another disease which is distinctly one of the colder season, especially of early spring, is pneumonia. But there have been many cases of that affection in New York during the past month, the various hospital records showing an unusual number of cases even now under treatment.—*Medical Record.*

The Tendency to Urban Concentration.

The preliminary census report of the United Kingdom, recently issued, presents some suggestive statistics. Thus, as given in the British Medical Journal, the figures for the total population of England and Wales are 32,526,075. The tendency to urban concentration is shown by the fact that over two-thirds of this population was enumerated in 1122 urban districts, and almost exactly two-thirds, of 21,946,346, in 435 towns of over 10,000 population. Evidently, rural England is badly in the minority. The disproportion must be still further increasing if we are to judge by the percentage of increase in the larger towns, while the smaller show an absolute decrease. Thus, in 472 towns of from 3,000 to 10,000 population the decrease during the decade 1891–1901 was 3.51 per cent., and in 215 towns of less than 3,000 population it was 12.93 per cent. The sciologic aspects of this concentration of population in cities are perhaps more serious than the medical ones, but the latter are serious enough. It is hardly probable that all the better facilities for sanitation, etc., that a parely urban population can still avoid breeding degeneracy. The man with the hoe, in spite of the sentimental pseudo-

philanthropy his hard lot has incited, lives under better conditions for physical development than his brother of the sweatshops and crowded slum. The best blood of the city is evidently a dimininging source and the outcome will be worth watching. Other points that are noticeable in the figures as given are the steadily increasing excess of females over males, at present nearly 7 per-cent.; the decrease in the birth-rate and in the average number of persons to a family; and also the decline in the death-rate, showing that at least sanitation is holding its own, and that extraordinary causes of mortality are in check. Our own census shows that one-third of the population of our country lives in towns of 4,000 population or more, so we have the same tendencies to meet in a hardly less degree. It may be that our civilization is in a transition period and is adapting itself to new conditions successfully. A hundred, or even fifty years ago, the city growth of the present day would have been attended with evils which we can now hardly imagine and which have been done away with in the progress of medical science and sanitation. We seem to be setting aside the laws of natural selection, by which, at the expense, it is true, of an infinite amount of human suffering, mankind in the past has been constantly rising from lower to higher planes and what the result will be is a question for the future. There are no reliable prophets in these times, but it is safe to say that the colossal human aggregations of the present will insure new problems and work for our profession.—Journal of the American Medical Association.

Can Acquired Immunity be Transmitted by Heredity.

There is perhaps no more interesting and no more difficult problem in biology than the question as to the transmissibility of acquired characters. It seems not impossible that a compromise answer will afford—here as elsewhere—the true solution, to the effect, namely, that such characters as are purely local are not transmissible by heredity, while those that represent a permanent change in the organism as a whole may be so transmitted, providing, of course, they have developed prior to conception. Thus, the loss of a member or the development of a neoplasm would not be capable of hereditary transmission, nor would disease as such, because of its temporary quality. It may be stated as a general proposition that disease as such is not hereditary, that which may be transmitted by heredity being a certain predisposition or susceptibility on the part of the cells of the organism. Disease in the fetus is acquired directly from the mother, just as occurs in post-uterine existence. An apparent exception is found in the case of syphilis, but even here it is not beyond the range of possibility that the mother had been first infected and through her the fetus. The problem of disease heredity revolves about the question whether the spermcell or the ovum may be the seat of disease, and of this convincing evidence is wanting. On the other hand, it can be conceived that immunity is at times transmitted by heredity. Although the mechanism of immunity is not fully understood, it would seem to depend on certain activities residing within the cells of the body, either as an inherent property or as a result of antecedent infection; or within the body fluids. We may accordingly designate the former, which is fixed and obviously cannot be conveyed from one animal to another, cellular or biologic, or active; and the latter, which is but transitory and is susceptible of conveyance from one animal to another, chemic or passive. Both of these forms of immunity may be conveyed from parent to offspring, though only the former can strictly be considered as hereditary, while in the case of the latter the transmission is entirely comparable with that which may be effected between one animal and another. Thus immunity may be conferred upon the fetus *in utero* by the blood of a mother passing through an attack of one of the effectious diseases, or on the nursing infant by the milk of such a mother, in the same way as like immunity may be conferred by treatment with antitoxin. The influence of heredity is here out of the question and the immunity is but transitory.

Etiology of Carcinoma.

E. v. Leyden (Zeitschrft f. klin. Med., Vol. 43, No. 1 and 2), who strongly adheres to the parasitic theory of cancer, relates how he first saw peculiar bodies in the ascitic fluid of a young girl suffering from ovarian carcinoma. These bodies appeared as large, oval cells which extended pseudopodia in a remarkable manner for from one to two hours, the movements finally ceasing without any subsequent retraction of the processes. Similar bodies were found in plueral exudates of cases of carcinosis, in the fresh juice from carcinoma and melanosarcoma. By accident it was found that a decoction of *Chrondus crispus* (Irish moss) forms an excellent culture-medium for growing these bodies from small tumor-masses. A number of tumors were then investigated microscopically and in all of them epithelial cells which

besides the nucleus contained a number of vacuole-like structures, with central reddish-stained dot, were found. They showed a remarkable resemblance to certain amabea and could be well distinguished from the granules resulting from degeneration of the cell or its nucleus. The author concludes that in all probability the cancer-parasite isa protozoon and not a yeast. The same subject is treated by Roswell Park (Buffalo Medical Journal, July, 1901) who briefly reviews the work done by the Buffalo Laboratory. The arguments he advances in favor of a parasitic etiology are many and wellnigh conclusive. Tumors occur in trees and plants, as well as lower animals, which bear a certain resemblance to carcinoma in structure and which are known to be parasitic. The occurrence of metastases, the local infectivity, and, finally, the presence of strange bodies in the cellls are highly suggestive. The recent study of the latter has solved the problem. There remains, however, much to be done to investigate the true natue of the micro-organisms, the exact position of whith in the animal kingdom is not yet clearly defined.—*Medical News.*

Dangers of the Thermometer.

1. It is possible for the thermometer to be laden with the usual flora of the oral cavity.

2. Such bacteria may retain their capability of growth for an indefinite time, at least two months, as shown by experiments.

4. Many pathogenic bacteria possess similar capabilities, and is not unreasonable to assume, although the experiments are not conclusive upon this point, that transmission of bacterial disease by the thermometer is possible.

4. Thermometers are easily disinfected.

5. Where possible each patient should be possessed of a thermometer, as much his own property, and as sacred to his own use as his toothbrush.

6. Where for reasons of economy or otherwise it is impossible to carry out the recommendations expressed in conclusion 5, the thermometer should be disinfected before and after using.

7. The custom now prevalent in the hospitals, of keeping thermometers in disinfecting solution is to be commended.—Rosenberger, *American Medicine.*

The Use of Preservatives in Food.

Many things are inimical to the bacteria of putrefaction that in no way injure the human organism if administered in small amount. In using boracic acid or borax as preservatives, it may be remembered tha one of the functions of the kidneys is to carry off just such foreign substances and soluble mineral compounds. These organs can, and do, carry off vastly greater amounts of single foreign substances (where people are in the habit of taking saline cathartics) than there ever are in food in which a few grains of a preservative have been placed.—Dietetic Gazette.

The Ideal Doctor.

Division of labor makes everything cheap —man first of all; and the increase of specialties has had the effect to lower the standard of professional life and morals, and to interfere with the development in the profession of strong, many-sided personalities, lending dignity to their calling, and yet masters in their several departments. As Henry George says: "I am for men." My ideal is a doctor who is educated all over, whose heart is tender, whose hand is steady, whose eye is clear, whose tongue is clean, whose brain is cultured, whose nerves are under perfect control—one who is broad-minded, and who does not look at disease through the narrow view of the specialist, who sees only from his own field of vision. I want a doctor whose knowledge of disease has been broadened and deepened and enriched by a wide and varied experience in general medicine, and sharpened and polished in some specialty afterwards—a doctor who has had a hospital experience, who mixes common sense with knowledge and experience, who has a heart swelling with sympathy for the poor sufferers who seek his aid, who carries a smilling face on his errands of mercy, who prefers substance to show, and regards reputation as a priceless treasure, to be guarded against the alluring temptations of modern society, or the tempting bait of gold offered for the prostitution of his talents to theperformance of illicit or illegal practices. I demand that he shall possess that innate monitor that we call conscience. And while it is true that there are many in our profession who accumulate wealth, who do not possess the characteristics I have portrayed, we must remember that there is much more in our lives than the mere acquisition of money. —*D. A. K. Steele, in Medical Age.*

Summer Diarrhea.

There are three types of summer diarrhea, that caused by inability to digest unsuitable food, that from bacterial action in tainted milk and cholera infantum, probably also due to milk infection. Prompt evacuation and change of food is indicated. Milk, including breast milk, should be

stopped in cases and substituted by dextrinized barley water, rice water, egg-albumin water, mutton broth, beef juice and plain boiled water for thirst. In case of vomiting the stomach should rest for 12 hours. The medicinal treatment is castor oil or calomel in divided doses if there is vomiting. If there is marked pyrexia and prostration when first seen the source of toxema should be immediately removed by irrigation of the bowel with saline solution, adding tannic acid if there be blood. The technic is described. Obstinate vomiting calls for washing out of the stomach with bicarbonate of soda added for acidity. When the toxema is controlled bismuth subnitrate and salicylate with some preparation of the digestive glands may be given. Increased peristalsis may be checked with opium when the bowels are cleared. With frequent watery stools, vomiting and threatened collapse hypodermics of morphine and atropin, high saline enemas or hypoderimoclysis may be used, and cool sponging with the ice cap be given. Collapse indicates hot applications and stimulation. Return to milk must be very gradual.—American Medicine.

Ectopic Pregnancy.

A critical study of 96 cases reported as repeated ectopic gestation, of which Varnier and Sens have retained 65 as proved to be such beyond reasonable doubt, has led them to the belief that this occurrence is much more frequent than is usually supposed. They go so far as to state that there is an evident tendancy to recurrence which should always be suspected. The second extrauterine pregnancy occurs in the opposite tube from the first. In only one of the 65 cases was it in the same. Ot 56 cases the second ectopic gestation followed the first by three to twelve months in 18, while 32 more occurred before the end of five years. In only 6 of the 65 did a uterine pregnancy intervene between the ectopic and its recurrence. There seems to be a tendency for the second extrauterine pregnancy to run a course similar to the first. The writers do not believe that the occurrence of a third ectopic gestation in one individual has yet been reported, but, as pregnancy has been known to recur once in the same tube, it follows that this might also take place in the opposite tube. Concerning the cause of recurrence, the writers shows the incompleteness of the greater number of reports found in journal, and hence their uselessness in drawing conclusions upon this point. In cases in which two ectopic pregnancies are not preceded by a uterine, it is probable that there is bilateral incomplete development of the tubes, interfering with the passage of the fertilized ovum to the uterus. Recurrence without intervening uterine gestation in women who have previously had a normal pregnancy, or several, naturally suggests puerperal inflammatory changes around or within the tubes. The tubes may appear healthy, with the exception of the presence of the ectopic pregnancy, during the operation for the first occurrence of this nature, yet this is not conclusive evidence that salpingitis does not exists and predispose to recurrence.—*American Journal of Obstetrics.*

The Social Evil in Tenement-Houses

The Committee of Fifteen, which is now trying in a practical way to bring about some reforms of vice in New York city, has taken up the subject of prostitution in the tenement-houses of that city. In a letter recently written to Governor Odell it says that the existing condition of affairs is not only deplorable, but intolerable. It seems that the practice of prostitution has become very prevalent in these overcrowded tenement-houses. The committee draws attention to the fact that the most shocking feature of this evil is the prostitution of young children. Women of ill-repute find shelter in these houses, where they are apparently exempt from police surveillance, and here they sow the seeds both of vice and the venereal diseases in a pormiscuous population, both of young and old of both sexes. The social evil must be attacked and exterminated in the tenement-houses before any permanent control can be gained over it in that city. The committee endorsed the legislation proposed by the Tenement-House Commission. We learn from the Medical Record that the penalty for allowing any part of a tenement-house to be used for immoral purposes is a fine of $1000, which shall be a lien on the property. This makes the owners of such houses, and not the wretched women who pursue their avocaiton in them, directly responsible for suppressing this vice.—*Philadelphia Medical Journal.*

Rheumatic Endocarditis.

A rheumatic endocarditis having once been established during the acute course of the disease, the question arises, What can best be done for it? In this connection, it must be rembered that the rheumatic poison is not only capable of causing serious lesions in the valve, but also of affecting the heart muscle as well; and the presence of fever combined with these facts would

seem to indicate that digitalis can hardly be expected to exert its good effect upon the heart muscle under these circumstances, but that on the other hand moderate doses of strychnine and the use of ammonium carbonate are probably the best cardiac stimulants for ordinary purposes. In this connection, we should not forget the very great value of opium and morphine in endocarditis, myocarditis, and pericarditis; for not only do these drugs give relief from the pain and suffering, but they diminish the patient's anxiety, quiet his restlessness, and slow the pulse by allaying nervousness and by direct action upon the circulatory apparatus. This question of slowing the heart does not, we think, receive sufficient attention. When we consider that a difference of ten beats a minute mounts up to 600 beats per hour and 14,400 beats a day, we can readily see that what may seem to be comparatively slight variations in pulse-rate may mean very great variations in the amount of work put out by the heart muscle in twenty-four hours. This is also a valuable point to remember in connection with the development of pericarditis, for there can be no doubt that the slowing of the heart rate, which prevents the two surfaces of the pericardium from being rubbed together, very frequently is distinctly disadvantageous. For this purpose, also, Luff has recommended that from eight to twelve leeches be placed over the heart, and after they have been removed an ice-bag applied; the leeches, it is asserted, giving speedy relief to the cardiac distress, and the ice-bag allaying pain and discomfort.—*The Gazette.*

Urotropin

In an article entitled "Two Cases of Urogenital Colibacillosis" (from the University Clinic for Skin and Venereal Diseases at Bern, Professor Jadassohn, Director; Deutsche Medicinische Wochenschrift, Aprial 11th, 1901), Dr. Wilhelm Karo reports a case in a man of sixty-five, who had had dysuria aud cloudy urine for a year. Eight days before the time of examination, and without ascertainable cause, he developed a sudden swelling of the left testicle, with much pain and fever. The urine was cloudy, but otherwise normal; and the cloudiness was not removable by filtration, sedimentation, or acids. The cloudiness was found to be dependent upon the presence of the bacterium coli communis; and expression of the seminal vesicles showed them to contain almost pure cultures of that organism.

The fluctuating scrotal tumor was punctured, and a thin, greenish pus containing only the bacterium coli evacuated. Under Urotropin administered in 0.5 gram (7½ grains) doses three times a day, the dysuria gradually disappeared and the secretion cleared up. With iodin vasogen and the thermophor the sensibility of the scrotal tumor was entirely relieved.

Nine days later the patient had a sudden chill, became cyanotic, with respirations 45 per minute, pulse small, 120, temperature 40.7 C. (105 3 deg F.), and singultus. Another abscess appeared at the lower pole of the testicle; this was opened. Nevertheless his condition became steadily worse, so that the testicle had to be removed that night.

He recovered slowly, though steadily. In three weeks cicatrizatioin was complete, and the patient's strength had increased pari passu. The Urotropin had been continued steadily, the urine was clear, and contained no bacteria; there was no dysuria. The cure was permanent.

The second case was of a more chronic nature. He was a man of twenty-seven, who had had gonorrhœa several times, the last attack of which resisted all manner of treatment. Four days before Karo saw him he had taken two teaspoonfuls of ordinary gunpowder. There was an immediate violent diarrhœa, followed by swelling of the right testicle with fever and pain The urethal discharge contained no gonococci; but the urine was cloudy and contained an abundance of bacterium coli. They were also found in pure culture in the secretion of the prostate and seminal vesicles.

In a few days a fluctuating tumor formed at the lower end of the affected testicle; evacuation thereof gave a sero-sanguineous fluid with abundant bacteria of the same kind. The fever and the pain then ceased, and the enteritis was controlled by calomel and rhubarb. In the course of a short time the urine cleared up under the daily administration of 1.5 grams (22½ grains) of Urotropin, and the bacteria disappeared entirely.

Death from Heat.

The official reports of the Bureau of Vital Statistics show that the number of deaths from heat during the week ending July 6 was greater than in any one week previously recorded. The total mortality was 989, the deaths in the different boroughs being as follows:

Manhattan and the Bronx, 689; Brooklyn, 264; Queens, 24; and Richmond, 12. While the bureau records as regards all the boroughs go back only to the consolidation, they cover a long period for Manhattan

and the Bronx, comprising the limits of New York before consolidation. The nearest approach to the recent heat mortality was in the week ending August 15, 1896, when there were reported in the two boroughs 671 deaths, or 18 less than in the week ending July 6, 1901. During the week ending at midnight on July 7, when there were 590 admissions, the number of deaths in Bellevue Hospital amounted to 64 the largest number in any one week since the period of extreme heat in August, 1896.—*Baltimore Medical and Surgical Journal.*

Etiology of Mental Deficiency.

Dr. Pierce Bailey presented a paper on this subject. He looked upon idiocy, imbecility and feeble-mindness as different forms of the same condition. Mental defects might arise in infancy or be prenatal. The disastrous effects of alcohol on the developing ovum had been demonstrated experimentally; but in his experience, while the progeny of alcohols were of unstable, nervous organization, he had not found idiocy especially common among them. Unfortunately society places almost no barriers to the marriage of persons who are either mentally or physically unfit. In the first two or three weeks of life it is impossible to determine whether or not an infant's mentality is normal. The rapidity with which the brain develops, shown by the fact that at the end of the second year it weighs three times what it did at birth, emphasizes the great importance of detecting mental defects at an early age and endeavoring to correct them as far as possible. It was well known that infantile convulsions arise from a great variety of reflex irritations, and he was of the opinion that where convulsions occur with sufficient frequency the epileptic habit may become established. In this way he would explain certain cases of epilepsy apparently idiopathic and occuring in persons having a clean family history.—*Archives of Pediatics,*

Operative Treatment of Carbuncle.

Madelung is an advocate of the operative treatment of carbuncle; he objects to complete excission, because it is a severe operation, attended with loss of blood, needless sacrifice of tissue, and a considerable scar; for several years he has been very successful with the following operation: The carbuncle is encircled on three sides by an incision (down to the muscle), forming a tongue-shaped flap, with the carbuncle in its centre; the flap is rapidly reflected like the skin flap in an amputation; bleeding is arrested by inserting a large pad of gauze between the flap and the bed from which it was taken, and applying pressure; with the sharp spoon all obviously dead tissue is removed from the deep surface of the flap, and the entire wound is disinfected; the flap is replaced over a pad of gauze, and a dry dressing is applied. After an interval varying from the sixth to the ninth day, the flap is united by means of sutures. It is said to be surprising how little of the carbunculous flap dies.—*Edinburgh Medical Journal.*

Rubber-Neck.

A recent newspaper account of an operation performed under the anesthetic influence of hypnotism relates that the "patient was an interested spectator," and watched the "warm blood spurt under the surgeon's knife!" As the operation in question was a curettement of the uretus, it would be exceedingly interesting to know just how the lady managed to see all this. Even the proverbial curiosity of the sex would find it difficult, we should think, to overcome anatomical difficulties in the way of observations which may appall even a "rubber woman.—*Medical Standard.*

Etiology of Convergent Squint.

The one essential cause of squint is a defective development of the fusion faculty. This is frequently associated with other developmental defects, namely, hypermetropia and congenital amblyopia. Where the fusion faculty is alone defective, or congenitally absent, there is usually an alternating squint with perfect vision in each eye, says C. Worth (Lancet, May 11, 1901). The treatment of squint should be to prevent the loss of central fixation in the deviating eye; to prevent deterioration of vision in the deviating eye: to train the fusion faculty at the earliest age; and to restore the visual axes to their normal relative directions. Congenital amblyopia and anisometropia predispose to squint by lessening the value of binocular vision. Heredity is a predisposing factor in squint. Of 1,278 cases studied there was a family history in 1,028.

Influenza and the General Mortality.

It would probably be wrong to attribute the enhanced pneumonia mortality altogether to "grip" infection; Dr. Reynolds' figures show a steady increase from 3.98% in the decade between 1861-70 to nearly twice this figure before the disturbing element of la grippe intervened. Nor can we estimate this earlier gradual increase as altogether due to the higher percentage of

those of advancing years in the general population; there are older communities where this factor cannot be counted on, that also show an increase in the mortality from pneumonia prior to the advent of the "grip." How to meet the special dangers this disease involves is a problem before us that we have yet to solve. The tuberculosis question is, as it at present appears, a comparatively simple one; the mortality it causes is steadily on the decrease. while that from acute pneumococcic infection, whether combined with the influenza virus or not, has passed it in the records of deaths it produces, and it may be we have not yet seen the worst.—*Journal American Medical Association.*

The Duty of Physicians as to Typhoid.

A great deal of responsibility falls upon physicians treating cases of typhoid. They should leave with those caring for the patient explicit written or printed instructions regarding the disposal of all excreta and other material which might be infected. And, not only this, but we believe that a personal demonstration by the physician of some good method of disinfection of excreta, will prevent errors of ignorance or misunderstanding. Of course, all cases should be immediately reported to the health authorities. The need of constant vigilance on the part of health officers and of personal responsibility on the part of physicians in preventing the dissemination of typhoid germs, has been deeply impressed on all by this unfortunate epidemic. And it is to be hoped that the impression thus made, at the cost of so much suffering and distress, will stimulate us to the practice of greater care in our prophylactic measures in the future.—*Yale Medical Journal.*

Some Points on the Use of Cocaine.

Dr. Wyatt Wingrave has been experimenting with various vehicles for cocaine, in order to obtain the maximum effect from the smallest quantity of the drug. He found that a two per cent. solution of *alkaloidal* cocaine, in equal parts of almond and petroleum oils, proved an efficient local anesthetic for the examination of and slight operations upon the nose and throat. Applied either by the means of an atomizer or a cotton swab, it produces a more prolonged anesthesia than a watery solution, though it takes longer before the anesthesia becomes established. He further found that an aqueous solution of cocaine hydrochlorate, five per cent., and sodium sulphate, two per cent., produced anesthesia more rapidly than cocaine alone, while the degree of anesthesia was equal to that obtained only by much stronger solutions of cocaine, when the latter substance is used alone. It is thus seen that not only is economy practised in the use of the expensive cocaine, but the risk of constitutional symptoms is minimized. The sodium sulphate was selected partly on account of its penetrating power and partly owing to its solvent action upon the globulins and other proteids which occur in the secretions.—*California Medical Journal.*

Second Attack of Typhoid.

Reinfection with typhoid fever a considerable period after complete recovery is established is extremely uncommon, but Nest investigated 118 cases with reference to recurrence and found 10, giving a percentage of 8.5 per cent. This, however, seems somewhat too high and would probably be greatly reduced were larger numbers of cases investigated. Among his ten cases, the recurrence occurred at periods varying from 45 years to 7 months. Curiously enough, of the two cases which died, the greatest time had elapsed since the first attack, namely, 45 and 25 years. One case which had an attack after an interval of 24 years, recovered. Etienne reports a remarkable case in which three attacks occurred in a woman. The first in her 27th year; the second in her 44th year, and the third in her 57th year, the patient surviving. He also gives details of 35 cases of double attacks. Larquier, writing of typhoid fever among the insane, reports ten cases of recurrence.—*Medical News.*

Danger of Massage.

Massage is often suggested as a remedy for intestinal obstruction. Its employment in very acute cases where considerable changes have taken place in the intestinal walls would probably be followed by a fatal result. There are cases in which massage may do good. These are mainly of the spastic variety of intestinal obstruction, or at the very beginning of subacute cases. One case has been reported where two operations for intestinal obstruction were done and in each case a spastic contraction of the gut was found, so that the diameter of the intestine was scarcely more than that of a lead pencil. At both operations relief was afforded by forcing the contents of the gut, through this narrow lumen and overcoming the spasm.—*Medical News.*

Insanity as a disease is not transmissible by inheritance, but may be acquired or evolved from a neurotic heredity as a basis. —*Medical Summary.*

Bubonic Plague on a Ship in New York Harbor

On the arrival of the steamship Hohenfels from Calcutta on Monday morning, July 22d, one of the Indian crew, a stoker, twenty years of age, was found to have an enlarged and inflamed gland, which could not be satisfactorily accounted for. He was removed to Swinburne Island and specimens taken from the gland and examined at the quarantine laboratory, and an organism believed to be the plague bacillus was found. Upon this discovery, the bacteriologist of the health office of the port went to Washington with the specimens referred to, and after an examination by Dr. Geddings and Dr. Rosenau, of the Marine-Hospital Service. Surgeon-General Wyman reported that the result of the examination confirmed the diagnosis made in the laboratory. The case is a very mild one, the patient having been found at work on the vessel. The crew will be removed to Swinburne Island for observation. The cargo will be disinfected before leaving the ship and each night the holds of the vessel will be subjected to sulphur to kill the rats. After the cargo is removed the vessel will be thoroughly cleansed and disinfected in every part. The Hohenfels is a steamer built for the East Indian trade and was recently put on the Calcutta-New York service.—*N. Y. Med. Journal.*

Adenoids.

Robert M. Lapsley writes that even when the patient "outgrows" the orignal trouble, the results of adenoids will be shown in a deformed and badly developed face, poor teeth, a narrowed nose, a chicken breast,and permanent impairment of the hearing. These children become not only stupid in appearance, but stupid in reality. In many instances, after a careless examination, the operator has been satisfied by simply removing the pharyngeal tonsils, where the introduction of the finger back of the soft tumor or tumors covered with mucus and easily bleeding.

Frances Huber believes that this condition is overlooked by the general practitioner, as the patient comes to him with all sorts of stories, not necessarily of a local nature. In advanced cases no one ought to fail to make a diagnosis. A moderate amount of disease, however may not give manifest symptoms, and in some instances the growths are found in the little patients who have practically not complained of local disturbances. Our suspicions should be aroused by repeated attacks of nasal catarrah, even though the patient appear well between the attacks. The diagnosis may be made from the symptoms, by means of the rhinal miror, and by digital exploration of the naso-pharynx. If, for any reason, it may not be desirable to resort to a digital examination, reliance may be placed upon the following conditions: 1. The presence of two small lymph nodes, painless and freely movable, at the angle of the lower jaw, one on either side. Though apt to become swollen with each new catarrhal attack, they return to their former size when the nasal trouble has disappeared, provided a mixed infection has not occurred. 2. Upon oral examination, if the size of the tonsils does not obstruct the view, numerous small lympyoid hypertrophies will be found upon the mucous membrane of the posterior pharynx; now and then, at the level of the soft palate, larger masses are present. The isolated prominences, more or less numerous, pearly and translucent in appearance, resembling larger or smaller sections of boiled sago projecting above the surface of the pharyngeal mucous membrane, are quite characteristic.—*American Journal of Obstetrics.*

Infantile Mortality.

The correspondent in Paris writes that the results of the recent census show a new deficit in the increase of the French population. The mortality of very young children is considered as the most important cause of the depopulation after the decrease of births. As far back as 1866 a doctor proved by reliabe statistics that 100,000 infants nursed out died annually in France from hunger, poverty, and want of proper treatment on the part of the nurses. In a more recent period attention has been directed to the large number of still-born children. In 1895, 41,572 children were registered as still-born; in 1896, 42,054; in 1897, 42,249; and in 1898, 39,805. A large number of these children belonged to unmarried girls, who, for obvious reasons, take little or no precaution for their confinement and are only too glad to be rid of their illegitimate ofispring. The Government has at all times made every effort against increasing infantile mortality. A law was passed in 1894 by which protection was extended to the life and health of children under two years of age;another law regulates the work of women during pregnancy, so that they can have proper rest and treatment at the physiological moment; while a third law removes the children from incapable or unworthy parents. A third cause of the depopulation, and certainly the most grave, results from abortion and infanticides. Abortion is practised to an enormous extent, especially in the large towns. The manifest cause of this is the general

laxity of morals of both sexes. Political economist have prescribed different remedies for this condition of things, but without much success; among others, organization of maternal aid in order to save the child; aid to the mother at her own home and until her complete recovery; maternity hospitals in each district, where the women would be delivered and cared for according ot the resources of medical art; creation of refuges where the illegitmate children would be cared for and brought up by the State. Each of these remedies has its value, but there is one which, up to the right-thinking men, and that is rendering the young man responsible for his acts. Up to the present no child can be legitimately "fathered" on a seducer, so the mother has no redress; hence the prevalence of the crime of abortion or of infanticide.—*American Journal of Obstetrics.*

Unguentum Crede.

At the stated meeting of the Philadelphia Obsterical Society, held May 2d, 1901 Dr. Frank W. Talley read a paper on "Puerperal Septicaemia Treated with Unguentum Crede" (*The American Gynaecological and Obsterical Journal*, July, 1901.) The author said:

While the report of a single case does not afford material upon which conclusions may be drawn, yet it may assume some importance as corroborative evidence when added to other similar reports. Wonderful results in the rapid relief of symptoms and cure of puerperal sepsis of grave degree have been reported by Crede, Liebreich and Jones of New York. The following cases illustrates the potency of the soluble metallic silver.

On the 2d of April this year, I was asked to see Mrs. J. with my friend Dr. C. D. Carr, Mrs. J. had been delivered of her first child on the 28th of March. The labor was uneventful, the second stage was aided by the use of forceps under aseptic precautions. The patient did well until the afternoon of March 31st, when she experience a violent chill attended with rise of temperature to 103 deg. F. and an increase of pulse rate from 72 in the morning to 120. On the following morning the temperature rose to 103 $\frac{4}{5}$ deg.F.and in the evening the temperatue was 104 deg.F. When I saw her on the evening of the sixth day after labor she presented the following clinical picture:

Temperature 104 deg. F., pulse 112, respiration 32. During the afternoon Dr. Carr had irrigated the uterus with four quarts of 1:4000 bichloride of mercury solution, which had been followed by a violent chill. Patient complained of severe pain, referred to the pelvis and had been sweating copiously. There was vomiting and diarrhoea. The mental condition was bad and she believed that she was going to die. The tongue was dry, heavily coated, with a brownish black streak down its middle. The teeth had sordes upon them. The abdomen was distended, tympanitic and tender. Upon vaginal examination the uterus was extremely tender, the cellular tissue felt through the vagina was indulated and boggy, and the secretions squeezed from the uterus by the examining fingers were of unpleasant odor. The infection was evidently of sudden onset and rapid progress.

The patient was placed on the following treatment: Whiskey and strychnia in full doses, calomel and opium. Ice-bags upon the abdomen and inunctions of silver ointment every four hours, using a piece the size of the end of the thumb, which was rubbed into the soft skin upon the inner surface of the arms, the axillae and the thighs. The nurse was directed to sponge the patient whenever the temperature went above 102 deg. F. High enemata of milk of asafoetida were used to relieve the abdominal distention. Intra-uterine douching was abandoned, but the nurse was directed to douche the vagina daily. The patient was so ill that when 10 o'clock on the following morning was suggested for the next meeting, Dr. Carr prophesied that the patient would not live that long and I shared in his opinion. On the following morning the temperature was 101 deg. F. with a pulse of 106. The pain in the abdomen had lessened and the patient had lost the anxious expression. She felt comfortable and was disposed to eat. At noon on the seventh day the temperature again rose to 103 $\frac{4}{5}$ deg. F., where it remained until 5 P. M., falling to 101 at 9. At 1 P. M. on the eighth day it was 103 deg. F.. falling soon after to 100 $\frac{2}{5}$ deg. F. From that time it continued, remittently, at a mean of about 101 deg. F., falling at 3 A. M. on the tenth day to 100 deg.F.,and then rising continuously, till midnight it had reached 104 $\frac{4}{5}$ deg. F. It there assumed a remittent type with mean of about 101 deg. F. till the fifteenth day, when it fell to normal with a pulse of 80. The inunctions, which had been kept up to this time at intervals of four hours, were discontinued. The temperature again began to rise till five days later it was 102 deg. F. with pulse of 116. Inunctions were again begun every four hours and the temperature fell reaching normal two days later, where it remained. Three ounces of silver ointment were used in this case.

Particularly striking in this case was the rapid relief of symptoms after the use of the ointment. In twenty-four hours after its employment the pelvic pain had disappeared, the tongue had begun to moisten, the diarrhoea had ceased, appetite had returned and despondency had given place to an expression of comfort. This is the usual reaction to the silver as has been pointed out by Crede.

Specific Gravity In Diagnosis and Treatment.

It has been discovered that the specific gravity of the body and the specific gravity of the blood run in parallel lines. A high specific gravity of the blood invariably indicates a high specific gravity of the whole body, and corresponding density of the tissues.

Many researches have been made by various observers, and it is universally conceded that normal density of the tissues of the body is always associated with soundness of body, physical endurance and a tendency to long life.

Higher degrees of corporeal specific gravity without exception correspond with a high degree of specific gravity of the fresh blood.

The specific weight of an individual and the density of his structures have been assigned entirely too insignificant a role in medical diagnosis and treatment. It is a well-established fact that the density of the animal body disclose in a most interesting manner the physical condition of its structure.—*Pacific Coast Jour. Hom'y.*

Strychnine.

Calomel is the only drug that is more useful than strychnine. Strychnine will enable you to make use, and good use, of veratrine and aconitine in the fevers. Strychnine, digitalin, and glonion are the triple alliance to face death when vitality runs low. When the pulse lacks sufficient power then is the time to give 1-20 to 1-30 grain strychnine hpodermically. It is not well to give full doses of strychnine as a routine treatment in fevers, but it should be used as indication demands. To meet collapse we may give 1-20 grain of strychnine every one or three hours until 1-3 of a grain has been given within the twenty-four hours.—C. E. Boynton, *Wisconsin Medical Recorder.*

Subcutaneous Injection of Gelatin for the Control of Hemorrhage.

The action of gelatin in favoring the coagulation of the blood is not yet explained, but its usefulness is becoming so much more apparent that it deserves another mention in these columns. Wagner has recently summarized many of the articles which have appeared relating to the subject, and gives the results of his employment of gelatin subcutaneously. His method consisted in injections of a 2% sterilized solution of neutralized gelatin made up in normal salt solution. Of this solution there were injected into the thigh or under the breast, with the customary aseptic precautions, 150 to 200 c.c. (5 to 7 oz.).

The hemorrhages of advanced phthisis were most favorably affected, though often it was necessary to inject the gelatin on many successive days. In gastric ulcer he met with equally good success. No harmful occurrences followed the injections.—Boston Medical and Surgical Journal.

A Corrector of Iodism.

Dr. W. H. Morse reports (Southern Clinic for May) success in the use of Bromidia, which he says has proved corrigental of Iodia. Disucssing his results he says: Vomiting is so frequent and troublesome a symptom, in many diseases besides irritation and inflammation of the stomach, as to demand much practical attention from the physician. So, although the causes are so various, and although we are actually treating a symptom, for this symptom Bromidia is remarkable effectual. We have all employed the remedy for colic and hysteria, two disorders where nausea and vomiting are as pronounced as they are persistent, and almost the first evidence of relief is shown by the disappearance of these disagreeable symptoms. It is quite as efficacious for the nausea and vomiting from ulcer or cancer of the stomach. There is nothing that will more quickly check the vomiting, and the hypnotic effect is quite in order.—*Medical News.*

Death Due to Hypertrophy of the Thymus.

While hypertrophy of the thymus, if not arrested, is properly regarded as a fatal disease, Taillens calls attention to the possibility of successful surgical intervention. In cases of sudden death due to cardiac failure there can be no question of treatment, but there is no need to stand idly by and permit a fatal termination in cases in which compression threatens a slower death by asphyxia. Hypertrophy of the thymus has played an important part in numerous medico-legal cases; autopsies have shown this condition to be the cause of death in instances in which poisoning and violence were suspected.—*Medical News.*

Such is Fame.

According to the newspaper reports, the president of the New York City Department of Health first heard of Professor Koch and possibly also of the tubercle bacillus when a reporter called upon him to interview him on the sensation of the day. "Who is this man Koch?" was the official's inquiry, and when informed, he said: "Well, I don't know anything about him," and then turned to weightier matters. It is probable, as the newspaper, says that he does not think Professor Koch is half as great a man as he is. With some New York City officeholders the vision is limited to the Tammany jurisdiction and nothing outside of that is worth knowing. The official in this case, however, is, as many of us can testify, not a bad type of a too large class of individuals who get into places in our large cities through political machination and pull. It is a public disgrace when they occupy positions such as the presidency of the Department of Health of New York City, which should be filled by qualified men, and have such an opportunity to show their ignorance.—*Journal of the American Medical Association.*

Protection from the Malarial Mosquito in Italy.

Dr. J. M. Eager of our Marine Hospital Service, states, according to the Philadelphia Medical Journal, that prophylactic measures are being taken on the railroads of that country for the protection of employes from the attacks of mosquitoes. Extensive areas of fertile land in Italy are almost wholly deserted in the malarial season. The shepherds who feed their flocks on these lands in winter go to the higher country in summer. The few peasants who are forced to remain behind go to the higher lands every night to sleep. But railroad employes must remain at their posts, and they form a class of sallow, fever-smitten men who have for a long time been a sorry sight to railroad travelers in Italy. The railroad companies now propose to furnish them protection as far as possible. Wire gauze is supplied, and the windows and doors of station houses are screened. Switch houses are made of wire gauze, and whole verandas of like material are built. Head-covering, similar to that used in America by men handling honey-bees, is provided for employes, who are obliged to expose themselves. Special material, supposed to be impenetrable to mosquito bites, is supplied for clothing. Surgeon Eager does not express any skepticism about the efficacy of these measures, but we should suppose it would be difficult to have the average Italian workingman adopt such precautions. We know from personal inquiry that it is not easy to induce the American workingman to observe common-sense precautions, as, for instance, in lead factories, grinding establishments, etc. If the Italian workingman at home is more reasonable than the American in such matters, it is more than can be said of him when he comes to this country.

Dr. Eager says that not much is to be expected from drainage and the use of petroleum in ridding the Roman campania of the mosquito pest.

No Secret Medicines Sold in Austria.

Carl Bailey Hurst, United States Consul General at Vienna, Austria, in a recent report to the State Department (Medical News, August 10, 1901) says:

"In consequence of many inquiries addressed to this Consulate General in the matter of the Government regulations in Austria regarding the imdortation and sale of patented medical and chemical preparations, I would report that the sale of "arcana," or secret remedies, has always been strictly forbidden in this monarchy. Trade in such medicines and advertisements of the same are under strict surveillance of the law. Further, those medicinal preparations of which the prescriptions are not open to inspection by physicians, or in the prescription of which the substance of the medicinal ingredients cannot be definitely recognized as to kind and quantity, may not be kept for sale in apothecaries. Only those manufactures may be considered as pharmaceutical specialties that contain drugs acknowledged to be medical remedies, as, for instance, balsam, copaiba, oleum, santali, and the like.

"Every new medicinal preparation intended for use by the public must be reported to the authorities, and its sale may not be begun until said authorites have no reason to prohibit the same. Prescriptions of foreign medicines must be accompanied by precise directions for their preparation from the foreign manufacturer, and be provided with his signature and business stamp. Altogether excluded are cosmetics that by their labels, wrappers, and advertisements are affirmed to be efficacious in the removal of personal blemishes—impure skin, freckles, liver spots, and baldness—and are, therefore, qualified as remedies.

"The Regulations in Austria in regard to the advertisement of patent medicines are likewise strict. All laudatory notices on local publications of cures and remedies

coming from abroad constitute a transgression of the trade laws, and, under certain circumstances, foundation for complaint of unlicensed medical practice."

Consul Hossfeld of Trieste transmits, under date of July 12th, a reports covering the same information. He adds:

"The Austrian law also undertakes to regulate the prices to be charged for patent medicines, for it provides that whenever the reasonableness of the price of such a remedy is questioned, it shall be rated on the basis of the official tariff promulgated in the Pharmacopoeia Austriaca.

"Those of our manufacturing chemists who are disposed to take the Austrian public or sanitary authorities into their confidence will probably not find it very difficult to obtain the necessary permission for the sale of their products, but I doubt whether any business which they may do in this country will ever prove a source of great profit to them.

Sero-fibrinous Pleurisy of Traumatic Origin.

Barjon and Lesieur (Lyon Med., May 5th, 1901) report two interesting cases of pleurisy with sero-fibrinous exudation following injury, and ultimately being proved to be tuberculous. In the first case a man, aged 33, an alcoholic, without any family history of tuberculosis, fell and bruised the neck and shoulder. Twelve days afterwards he complained of oppression on the least effort, and slight shivering, and two or three days later was found to have an effusion into the left pleura reaching to the spine of the scapula. Paracentesis was performed three times; after the third operation the effusion did not recur, and the patient rapidly improved. The fluid from the third tapping injected into the peritoneum of a guinea-pig caused death, with marked signs of tuberculosis, and about five weeks after the last tapping the blood serum of the patient agglutinated Koch's bacilli with one-fifth dilution. In the second case, a man, aged 53, an alcoholic, with good family history, fell and contused his left side. For more than three months the pain in the side continued, and was increased by deep respiration, but during this time there was no cough or shivering and no waisting. The patient applied for treatment on account of the persistent pain and was found to have a moderate pleuritic effusion which one parancetesis cured. He had no definite sign of phthisis, the pleuritic fluid caused marked tuberculosis when injected into a guinea-pig's peritoneum. About three months after his discharge from hospital the patient returned with definite signs of bilateral phthisis, most more at the left apex. The authors consider that both were cases of latent tuberculosis, and that the injuries asked as exciting causes.—*British Medical Journal.*

Treatment of Infantile Diarrhea.

W. H. Robey (Phil. Med. Jour., July 27th, 1901) gives the following treatment for infantile diarrhea:

(a) Cleanse the bowel of bacteria and their toxic products by the use of one grain of calomel in one-tenth-grain doses at half-hour intervals. combined with colon irrigations. (b) Provide unsuitable culture media for the bacteria by withholding food for twenty-four hours and giving sterile water at frequent intervals. It is perhaps well to allow the mother to think that she is giving a food in order to carry out this important part of the treatment. For this purpose albumin-water (whites of two eggs, a pint of boiled water, a pinch of salt and a teaspoonful of brandy) may be employed, a half a teacupful being given every two hours. Vomiting may be relieved by washing the stomach, using a soft rubber catheter, and a high temperature lowered by a tepid bath. After twenty-four hours the child should be put on a weak modification of sterilized milk. (c) Soothe an irritated intestine when the long-continued condition makes it necessary. (d) Support the patient against constitutional symptoms, as in other acute diseases of childhood. (e) Guard against infection of others by isolation, when possible, and scrupulous cleanliness.

Auto- Inoculation of Cancer.

As a contribution to the subject of the causation of cancer, Dr. A. T. Cabot reports (Boston Medical and Surgical Journal. May 16, 1091) an interesting case of what appears to have been an accidental inoculation of cancer in a fresh wound. The patient was a man who was suffering from cancer high up in the anterior wall of the rectum. A Kraske incision was made and the cancer dragged down into this opening and removed through it. During this manipulation the fluid from the cancerous growth was rubbed over the wound made by the Kraske operation. At the end of four years the cancer had not recurred at its original site, but two years after the operation a hardening of the tissues was noticed behind the rectum, at some distance of course, from the site of the original growth. Cabot operated for this seco d growth, which was about as large as a hen's egg. On microscopical examination

it was found to be and adeno-carcinoma with colloid degeneration identical with the original growth. The scar in which the secondary growth took place was separated by an interval of five or six inches from the seat of the original growth. As Cabot points out, this is not a case of direct extension of the disease. The lymphatic vessels from the seat of the original disease run upward to the lumbar glands, and not downward toward the point of recurrence. This anatomical relation, together with the absence of any lymphatic structure in the recurring nodule, removes any suspicion of this having been a secondary growth in a lymphatic gland. It seems, therefore, that this was a transplanation of cancer ;in other words, a true autogenous inoculation. The conditions were certainly favorable for such an event, as the cancerous growth, torn and squeezed by the forceps, was incidentally rubbed for several minutes on the fresh wound.

Dr. Cabot points out the practical importance of taking great care in the removal of cancer to avoid such a contingency. From a pathological, or we may say theoretical standpoint, the case is certainly an interesting and apparently conclusive one. It was an accidental experiment, such, of course, as would not be justifiable intentionally in any patient, and therefore of unique importance.—Editorial in The Philadelphia Medical Journal.

Tubercle Bacilli in Cows' Milk as a Possible Source of Tuberculous Disease in Man.

At the recent meeting of the Tuberculosis Congres, Dr John McFadyean (Professor of Comparative Pathology and Bacteriology, Royal Veterinary College) gave an address on this subject, in the course of which he stated that he was overwhelmed at finding himself in a position which compelled him to offer criticisms in the pronouncement of one so distinguished as Professor Koch. (British Medical Journal Aug. 3, 1901). The identity of human and bovine tuberculosis had been generally supposed to have been establlshed by Professor Koch himself on the ground that the lesions in the two cases contained bacilli identical in morphological, tinctorial, and cultural characters, and that the artificial cultures from both sources produced indistinguishable effects when employed to infect a variety of animals. Subsequent observation had brought forward additional evidence of this identity, such as the discovery that tuberculin produced a specific reaction in tuberculous cattle whether human or bovine bacilli had been employed in its preparation. It was therefore concluded that human tuberculosis might have an animal origin and *vice versa*. Professor Koch now asked them to discard this conviction, and his train of reasoning appeared to Professor McFadyean to be the following:

1. That the bacilli found in cases of bovine tuberculosis were much more virulent for cattle and other domestic quadrupeds than the bacilli found in cases of human tuberculosis.

2. That this difference was so marked and so constant that it might be relied on as a means of distinguishing the bacilli of bovine tuberculosis from those of the human disease, even assuming that the former might occasionall be found as a cause of disease in man.

3. That if bovine bacilli were capable of causing disease in man there were abundant opportunities for the transference of the bacilli from the one species to the other, and cases of primary intestinal tuberculosis from the consumption of tuberculous milk ought to be common occurrence. But *post-mortem* examination of human beings proved that cases of primary intestinal tuberculosis were extremely rare in man, and therefore it must be concluded that the human subject was immune against infection with the bovine bacilli, or was so slightly susceptible that it was not necessary to take any steps to counteract the risk of infectiou in this way.

Professor McFadyean submitted that at least one of the foregoing premisses was ill-founded, that the others had little or no bearing on the question, and that reasonable grounds remained for regarding tuberculous cows' milk as distinctly dangerous to human beings. He did not deny that bovine tubercle bacilli were, as a rule, more virulent for cattle and other domesticated animals than human bacilli, or that experimental results indicated that in natural circumstances there was little danger of cattle becoming infected from human beings; but this could not be held to prove or even to render it probable that bovine bacilli had only a feeble pathogenic power for man. The probability was entirely the other way, for it was well known that while the majority of disease-exciting bacteria were harmful to one or two species only, all those that were common to all the domesticated animals were also pathogenic to man. Professor McFadyean regarded the view that the difference between bovine and human bacilli as regarded virulence to cattle was sufficient to distinguish one from the other as very far from proved. It was possible that the normal virulence of bovine bacilli for cattle might be reduced by passage

through the human subject. The third proposition in Dr. Koch's argument was, according to the speaker the only one really germane to the point at issue.

He traversed Dr. Koch's statement that primary tuberculosis in the human subject was extremely rare by citing analyses of the *post mortem* records during the last few years of the Hospital for Sick Children, Great Ormond Street, and of the Royal Hospital for Sick Children in Edenburgh. Out of 547 cases of tuberculosis the proportion of primary infection through the intestine was found at the former institution to be 29.1 and at the latter 28.1 per cent. Professor McFadyean hence submitted that there was strong *prima facie* evidence that animals were a possible source of human tuberculosis. Professor McFadyean then turned to the question of infection by milk containing tubercle bacilli. Criticising Sir R. Thorne-Thorne's Harben Lectures, he pointed out that if the consumption of such milk were the cause of the increased number of deaths from tabes mesenterica, that disease should have become more instead of less fatal to children between the ages of 1 and 5 years. He can come to the conclusion that the Registrar-General's returns did not afford much trustworthy information with regard to the number of cases of primary alimentary tuberculosis, and were absolutely worthless as an indication of the extent to which human beings were infected by means of milk. Of more use were investigations relating to the frequency with which milk contained tubercle bacilli. About 30 per cent. of milch cows in this country were, he stated, tuberculous, but he did not believe that the milk was as a rule dangerous unless the udder was affected. He thought that about 2 per cent. of the milking cows of this country were so affected; in every such case the milk contained tubercle bacilli, often in enormous numbers, and the danger was rendered greater by the fact that the early stages of tuberculosis of the udder were unattended with pain or tenderness in milking or obvious change in the character of the milk. Milk might also be contaminated with tubercle bacilli owing to the dust and dirt which it frequently contained. With regard to remedies, Professor McFadyean considered that to agitate for legislation such as had been effectual with cattle plague and pleuro-pneumonia would, owing to the wide extent of the diseases, prevent any Government from touching the subject. The greatest obstacle to successful action against tuberculosis was the ignorance of the laity regarding the cause of the disease; there was a want of conviction among cattle owners that tuberculous animals were dangerous to their companions. He believed the systematic use of the tuberculin test throughout the country impracticable on the ground of expense, and also because it would disorganise the breeding and milking trades. He preferred to recommend periodic inspection at brief intervals by competent inspection of cows in outside districts acquire by certain cities through Act of Parliament should be made general. He supported also the compulsory notification of udder disease, and of symptoms of tuberculosis in milch cows, and the interdiction of the sale of milk from any cow suffering from tuberculous disease of the udder or exhibiting clinical signs of tuberculosis. He regarded the boiling of milk merely as an antidote, and held that it did not absolve public health authorities from all concern with the subject. He concluded by appealing to Congress to press for measures to prevent the transmission of tuberculosis from the lower animals to human beings.

The Nature and Origin of Pigments.

Very little has been written on this subject. The British Medical Journal, July 27, 1901, has an editorial on the chemical nature and origin of the pigments of living organisms. The colors of insects and birds have, it is true, received a large amount of theoretical consideration at the hands of the evolutionist. The Darwinian looks for examples of utility in the struggle for existence—warning colors, mimicry, etc.—and then dismisses the origin of coloring with the magic words "natural or sexual selection." The whole subject, however, demands a far deeper inquiry at the hands of the physiologist, for it is becoming more and more evident that the orign of pigment is bound up with the chemistry of growth, and the physiological functions of living organisms. Three years ago Dr. Marion Newbigin gathered together the fragmentary knowledge we possess on the nature and distribution of pigments, and published a most useful monograph entitled *Colour in Nature*. Dr. Bohn has published recently a similar short and suggestive summary of the researches on pigments, but renders little service to science by improvising a theory of their evolution. He supposes that cells (plastides) were preceded by more elementary bodies (plastidules). That the chromatin of the nucleus consists of collections of plastidules, and that pigment granules and the chloroleucites containing the chlorophyll of plants are also plastidules which now live under conditions of symbiosis in cells. For the further de-

tails of this theory Dr. Bohn's book must be consulted, but no evidence in favor of the theory will be found. The native pigments may be classed under five heads: (1) pigments of direct physiological importance, such as the derivatives of such as hæmoglobin and chlorophyll; (2) derivatives of such pigments, such as the derivatives of hæmoglobin, urobilin, hæmatoporphrin, and possibly melanin; (3) waste products, such as uric acid and lepidotic acid, found by Hopkins in the wings of butterflies (*Pieridæ*). The white of the garden white butterfly is due to uric acid. The silver lines of the mackerel and other fishes are due to crystals of guanin, of the xanthin bases; (4) reserve products, such as lipochromes found associated with fat. Carotin, the coloring matter of carrots, beets, etc., is said to be a cholesterin fat. Carminic acid of the coccus is a glueoside; (5) introduced pigments such as pigment taken up by a parasite from its host, chlorophyll by larvæ, etc. The little that is known about these pigments, apart from their beauty, is of such interest that it should stimulate further inquiry. The microscoccus prodigious growing on moist bread produces the miracle of the bleeding host. The purple pigment of bacterium beggiatoa rosco-persicina according to Englemann, breaks up CO and sets free O under the influence of light. The green pigment of the coral polypus of the Australian barrier reef is accredited with the same function by Dr. Hickson. The pigment of vibro cyanogens reacts like the aniline dye tryphenyl-rosaniline. The beautiful pigments of birds' eggs appear to be entirely derived from the blood shed in the bursting of the Graafian follicle. Biliverdin and haematopordhyrin respectively produce the green-blues and red-browns of the combs and wattles of birds. The pigments which produce the colors of fruits and flowers and autumn tints seem to be associated with diminished power of assimilation and growth. Like-wise the senescence of the nerve cell is accompanied by increased pigmentation, and the melanin, according to Dr. Bohn, owes its origin to the chromatin of the cell nuclei. The effects of light and food on pigmentation offer a wide field of inquiry. Poulton has changed the color of larvae by feeding them in turn on the green parts and the white midribs of cabbage leaves. Cunningham has caused the under surface of soles to become pigmented by illuminating the base of the acquarium with mirrors. Poulton and Schroder have hanged certain larvae from one color to another by placing them on colored papers. Crustaceae have been bleached by keeping them in caverns, while the colorless inhabitants of caverns have been pigmented by trasferring them to the light. The absorption and utilization of light energy, or the protection of protoplasm against light must be amongst the first function of pigment.

Cancer of the Pylorus.

The prognosis of carcinoma of the pyloric end of the stomach after gastroenterostomy is generally accepted to lie within the limits of one to two years, and in cases where the second year has been overstepped, doubt is felt as to the correctness of the diagnosis. In order to illustrate that at times this limit of time is markedly overstepped, H. Strauss (Berl. klin. Woch., March 11, 1901) ralates the history of a man, aged 35, who had previously enjoyed good health with the exception of gonorrhœa, syphilis, and one attack of typhilitis. In 1895 he vomited, at first about every fortnight, but suffered no pain. There was no hæmatemesis. In 1897 he sought advice on account of vomiting of large quantities of "pap"-like material, of loss of flesh, and abdominal swelling. The report at this stage shows that the patient was wasted but not cachectic. A tumor was felt under the left lobe of the liver; it was about the size of a walnut, and not painful or tender. There was free HCl in the contents of the stomach. No sarcinæ were found. A laparotomy was performed, and a small tumor about the size of a small apple was found in the pylorus; it was adherent to the surrounding tissues. Several small round knobs were also discovered, situated on the walls of the stomach. As extirpation was impossible, gastro-enterostomy was performed. The patient picked up well, and gained rapidly in flesh and general strength, and stated that for $1\frac{1}{4}$ year he felt no inconvenience at all. About the beginning of 1899, however, the vomiting began again. In June, 1900, he was admitted into hospital with thoracic signs, that is, dulness at the right base. The patient died of cardiac weakness in $1\frac{1}{2}$ day. A necropsy was made, and the condition in the abdomen was as follows: A coil of intestine was adherent to the stomach and abdominal wall, and showed infiltration with dense, flat, whitish masses. There were also small dense growths in the large gut and in the omentum. The stomach wall at the pyloric end was much thickened, and the muscular layer showed some hypertrophy. The mucosa was densely infiltrated with cancerous tissue, but showed no definite tumor. The pylorus was closed by cancerous growth. The infiltration extended along the lesser curvature, as far as the

œsophagus and up to the fundus. Further growths were found in the mesentery, appendices epiploiceae, and in the recto-vesical pouch, also in the capsule of the liver. Microscopically the growths proved to be glandular carcinomata with abundant fibrous tissue (scirrhus). The conditions found *post mortem* were summed up: (1) fibrous pneumonia of both lobes of the right lung; (2) chronic fibrous pleuritis (carcinomatous); (3) hydropericardium; (4) left pleural effusion; (5) carcinoma of the pylorus; (6) obliteration of the pyloric opening (carcinomatous) (7) gastro-enterostomy (results of); and (8) chronic carcinomatous peritonitis. Strauss points out that this case lasted 3 years and 4 months after the gastro-enterostomy, and that the cancer was probably already 1½ year old at the time of the operation. Further, he considers it an important point that at the operation a definite tumor was found and 3⅓ years after the palliative interference this tumor had given way to a general indefinite infiltration. The death actually was caused by the pneumonia. He recalls another case reported by Alsberg, where the patient lived 3½ years after the operation, and proceeds to discuss the possibility of a retarding of the growth simply in response to the laparotomy. The next point of interst in his case is the fact that the effusion in the pleura was left sided. H finds that, not only is this extremely common, but under certain circumstances, a left-sided pleural effusion may point to the existence of a cancer in the stomach. The age of the patient is also a point of interest. He finds that cancer of the pylorus attacks younger subjects than cancer of other parts of the body, with perhaps the exception of cancer of the female genital organs and breasts. In 245 cases of eancer of he stomach, 9.5 per cent. occurred in subject under 36 years of age, and 21.2 per cent. under 41. In 411 cases of cancer, not of the stomach, 5.8 per cent. occurred in subjects under 36, and 12.4 per cent. un-41. He quotes other statistics, which, in the main, agree with these.—British Medical Journal.

Use of the Roentgen Rays in the Diagnosis of Plumonary Tuberculosis.

Dr. Hugh Walsham in his paper, presented to the Tuberculosis Congress and published in the British Medical Journal Aug. 3rd 1901, asked the following questions: Can the Roentgen rays show tubercle in the lung, if so, at what stage of their development? Can the rays detect tubercle in the lung before the other means of physical diagnosis at our disposal? In a picture of a normal chest, it was seen at once that the pulmonary image in health was quite transparent from apex to base, with the exception of a few ill-defined shadowy lines to the right of the heart shadow. These cardiac lines were seen more or less pronounced by all skiagraphs of the healthy chest, and must, therefore, be considered normal. On what did they depend? Were they caused by the lower division of the longer bronchi? The author thought not. These cardiac lines were caused, no doubt by the junction of the pericardium with the pleuræ. The shadow of the pericardium which contained heart in the anterior position was well seen. The shadow of the diaphragm was also well seen. If the diaphragm were watched with the screen it is seen that it did not, as physiologists said, become flatter with inspiration. Its curve was alway smaintained unaltered; it plunged up and down piston-wise, and now came a point of great importance in the diagnosis of pulmonary tubercle. The movement of the diaphragm on the affected side was much less affected than on the non-affected or less affected side and this when the disease was limited to one apex. Why this should be so was hard to explain, but the fact remained. The dead lung outside the body cast a very distinct shadow, although transparent in the living condition. At present he could not offer any explanation of that curious fact. There was one other shadow and that was one occasionally seen as an ill-defined curve shadow in women with large mammary glands. In a well-developed case of pnlmonary tuberculosis the clear pulmonary image was obscured by flocculent shadow, punctate in parts. Now on what did those shadows depend? Were they due to tuberculous consolidations, or to patches of congestion of caseation or pleural adhesions, or what? The shadow caused by grey and yellow tubercle was nothing like so dense as that thrown by caseation. It had been asserted that the blood next to the bones was the most opaque tissue of the body. With that assertion he could not agree. The questions proposed for solution might be answered by saying that, though the Roentgen rays would not disclose the earliest stages of tuberculosis in the lungs, they would definitely show tubercle in the lungs, and that at a comparatively early stage. It might be hoped that that means of detecting an early tuberculous shadow brought a little nearer the day when internal tubercle might perhaps be treated with chemical rays, as external tubercle—namely, lupus—was being treated to-day with such conspicuous success. In the future one might perhaps be able to say of pulmonary tubercle: "It comes as a shadow, so departs."

Hepatic Colic.

Huchard, in a clinical lecture (Journal de Med. et de Chir. Pratiques, May 10th, 1901), points out the extreme variability presented by hepatic colic. He quotes the case of a woman recently under his care, who for years was treated for some gastric disorder of which the chief manifestation was paroxysmal pain. Two striking features in her case were that the pain came on regularly about three hours after food, and the other was that the pain was nocturnal. These two facts pointed either to the presence of the pseudogastralgic form of hepatic colic or to hyperchlorhydria. That this latter condition may come on in paroxysms during the night is stated to be not uncommon, and is explicable on the grounds that when the stomach becomes empty the excess of acid contained in it is more likely to irritate the mucous membrane. So far as Huchard's case was concerned, it appeared on careful cross-examination that the attacks of pain lasted for about a fortnight, after which there was a period of complete intermission. This was much more in accordanced with hepatic colic, and it was found moreover, that the urine was muddy in appearance and contained urobilin. In cases like these it is generally possible to ascertain the presence of some distension of the gall bladder, with pain on palpation—a phenomenon which was present in this case which therefore confirmed the diagnosis of pseudogastralgic hepatic colic. The writer's prescription in this case was 10 grams of sodium benzoate and 20 of salicylate, divided into 30 cachets, one to be taken with food three times a day. Huchard emphasises the importance of diet. The meals should be regular, and no fat or salt should be consumed. Regular daily exercise should be taken, and the bowels should be most carefully attended to. The same writer has found the local application of salicylate of methyl of use.—*British Medical Journal.*

Typhoid Fever.

M. S. Shellenburg says that more has been accomplished by the prophylactic treatment of typhoid fever than by the cure, by protecting our streams and water supplies from contamination, and making our drainage perfect. Typhoid fever is most prevalent in cities in which the drainage is bad, and startling results are shown from statistics taken before and after perfecting the drainage in a city. As long as a privy-well has not become contaminated by the typhoid bacillus there is no danger of typhoid fever. This theory explodes the theory of auto-intoxication, which is that an individual may become a prey to the disease without coming in actual contact with the typhoid bacillus. The excreta is the contagion bearer and should therefore be thoroughly treated before being disposed of. Great care should be taken in protecting the permanent part of the bed, such as the mattress, and this can be done by spreading a rubber blanket or a mackintosh over the mattress. ordinary boiling will destroy the germs in the bed clothing and linen of the patient; the stools, however, must be treated specially. Bi-chloride of mercury in the proportion of one part to five hundred of water is the best disinfectant for use in the country, but will not do for the linen as it stains the latter. In cities, carbolic acid, one part to ten, answers the purpose best. Chloride of lime, one to twenty-five has rather a pleasanter odor than carbolic acid. Whitewash, twelve parts unslacked lime to one hundred of water, is useful in the country, it is most available. Sulphate of iron, a tablespoonful to a pint of water, has been used. The buttocks, anus and genitalia of the patient should be washed after the bowels have been moved, in a 1 2000 bi-chloride of mercury solution. Door-knobs, clinical thermometers etc., which have been handled, should be cleansed in a 1-1000 solution of the same.—*Medical Times.*

Some Etiological Aspects of Malignant Neoplasms.

There is not wanting evidence indicative of the parasitic origin of malignant diseases, as exemplified in various forms of new growths, but, despite the industry and the persistence with which investigation along this line has been pursued, conclusive evidence is yet wanting. The difficulties, says The Medical Record, Aug. 10, 1891, are not lessened by the fact that satisfactory explanation is lacking also for the origin of the so-called typical, homologus, or benign neoplasms, as well as for their occasional transformation or degeneration into malignant growths.

Apparently the two most important etiological factors in connection with malignant disease are heredity and traumatism. Next in importance perhaps is sex, but, as Dr. E. N. Nason (British Medical Journal, May 18, 1901) points out, the great preponderance of malignant disease in women is found, on examination, to be due to the great frequency with which the uterus and the breast are involved. Thus of 4,855 cases of carcinoma occurring in 1,837 males and 3,018 females, one or the other of these organs was the seat of the disease in 40 per cent. of the women. Excluding these cases, the disease appears

to be rather more common among males than females, and this difference may be attributed to the greater liability of males to traumatism especially. Statistics show further that the increase in mortality from carcinoma that has been observed in the last thirty years is almost twice as great in males as in females. This increase is not entirely real, but is due in part to greater skill in diagnosis, particularly with reference to malignant disease of the stomach, to which a large proportion of deaths from carcinoma in men are due. At the same time the mortality from malignant disease of the uterus and the breast has been lessened in consequence of the great advances that has been made in surgical treatment.

Analysis discloses also that after the third decade the individual liability to carninoma of the stomach, the breast, or the rectum increases progressively to the eighth decade and then declines; while the liability to carcinoma of the uterus rises rapidly and progressively to the eighth decade, when it is double that of the other, and then declines.

There are reasons for believing that carcinoma develops under conditions in which the resisting power or the vitality of the cells of the body has been in some way lowered, so that invasion by a parasitic organism is favored; and it is thought that this may take place in one or more of several ways *e. g.* absorption from the respiratory tract, or direct inoculation either through abrasions of the skin or mucous membranes or the bites of blood-sucking insects.

Medical Colleges in St. Louis.

A very few years ago St. Louis was overburdened with medical colleges, and nearly every physician was a "professor"—over half a score of institutions able to grant diplomas, an average of thirty professors and as many assistants to each, and students by the wholesale.

The teaching was no better and no worse than in other cities, and the students were the average. The boards of health permitted registration after a two years' course. What with low fees, "concessions," great energy on the part ot managers, and easy admission and graduation, "doctors of medicine," so-called, were turned out by the hundred, to meet (most of them) bitter disappointment and ridicule.

The action of the boards of health in requiring preliminary education and a three (and now a four) years' course, has changed all this. Moreover, the action has been wisely seconded by the colleges themselves. Students no longer matriculate "to get through." The "hurry boys" dropped out, and the graduating classes became smaller. Nor was this all. Requirements for preliminary education and graded courses produced a higher average of intelligence and better instruction.

Our medical colleges have wisely and effectually aided the State boards. Not long ago two of the leading colleges consolidated, and we have another movement in advance—the union of the Marion-Sims and the Beaumont colleges. The Woman's College has dropped out, and there are signs of further cutting down in the list.

So it is that in a very short time St. Louis can be congratulated on not only a reduction in the number of colleges, but a decided increase in the strength and availability of those continuing. The educational era for St. Louis is but begun, and our medical colleges will not be found wanting.—Interstate Medical Journal.

Malaria Associated with Acute Abdominal Pain.

The Interstate Medical Journal suggests malarial as a probable cause of many cases of abdominal pain. The editor says:

It may not be amiss to remind the practitioners of the South and Central States, wherein malaria is frequently seen, that some cases of severe abdominal pain likely to be thought appendicitis or colitis are really of neuralgic nature, due to the presence in the system of the malarial plasmodium. The symptoms point at first entirely to the abdomen, and it is only when the chill and fever occurs that one would think of malaria. In these cases it is urged to have a blood examination made, when the key to the situation will readily be discovered.

As to the manner of the causation of the neuralgic pains in the abdomen and neuralgia in general in association with malaria, Laveran thinks that the symptoms are due to an actual blocking up of the blood vessels by accumulation or spasmodia. Gowers, however, thinks the malarial pains are due to a depressed and anemic state of the nervous system. Marchiafava and Bignami question the etiology of this blocking up of the capillaries by the plasmodia.

The diagnosis of malarial pains can best be treated by first classifying malarial neuralgias. There are two varieties: *first*, toxic; and *second*, post-infective. Toxic neuralgias come on during the febrile attack and are associated with the presence of the parasites in the blood. The recognition of the malarial neuralgia is easy. The great

difficulty lies in the recognition of the post-infective neuralgia. These cases are not associated with the presence of the plasmodia in the blood, but are the result of the anemic state of the organism.

Leube lays stress on the enlargement of the spleen in these cases, with history of chills and fever.

The Treatment of Inoperable Carcinomata of the Uterus.

Desider Stapler (Homoepathic Journal of Obstetrics, puts forth his views with regard to the treatment of inoperable carcinomata, more particularly in opposition to the so-called palliative operation of ligature of the uterine vessels advised by Jonescu. It is necessary, in the first place, to define when a carcinoma of the uterus becomes unfit for a radical operation. And to this end the author turns to the actual kind of growth present, and urges that it is the peculiar character of the growth and not the particular operation employed which influences the result when radical operations are made use of. He illustrates this with the familiar case of epithelioma of the cheek, some cases of which may exist a long time and yet be cured perhaps even by a thorough cauterization (Kaposi), and yet others, although widely removed at an early stage, rapidly recur and infect the glands.

As rough guides in practive, he regards the consistency of the growth and its rate of growth as all-important. Very hard, slow-growing cancers of the uterus offer a better prognosis, even when a large mass is present, than small, soft, rapidly-infiltrating kinds of growth which infect the lymphatics and glands early. This rough guide as to hard or soft growths can be made use of in diagnosing cancers of the fundus uteri by their resistence to the curette. Next turning to palliative operations, the author questions whether Jonescu's method is a justifiable operation. It is severe, because it entails opening the abdomen in order to ligature all the vessels of the uterus, and such an operation, without prospect of much amelioration in a wasted, cachectic patient, is a very serious matter. Again, does ligature of the uterine vessels produce atrophy? Ligature of vessels either results in the formation of a collateral circulation or in gangrene. The former is commonly the result of ligaturing the vessels of the uterus, and such a collateral circulation is very rapidly established. Atrophy of an organ, the author contends, never results from ligature of its vessels. The adherents to the operation of ligature of the uterine arteries fibro-myoma admit that such a procedure has a very small scope for application, and the operation is being given up. Something, however, can be done which does not submit the patient to do so serious an operation as Jonescu's or Kustner's (complete closure of the vagina and the making of a rectovaginal fistula, so that the foul discharges will drain into the rectum.)

In the author's opinion, the best procedure is the thorough scraping away of the growth with a sharpe curette, and then, after taking plenty of time to stop hemmorrhage by hot injection or ice-water or pressure, to thoroughly cauterize the surface which remains with fuming nitric acid or chloride of zinc (thirty per cent. solution). The nitric acid is applied on small sticks wrapped in cotton-wool, only two or three drops of nitric acid being taken up at a time. In the case of large ulcerating cavities, packing with wool pledgets, each with two or three drops of nitric acid on, may be employed, the vagina being protected by gauze packing; such a packing must be removed in from one to two days. Another method recommended is to scrape away all growth, then stop bleeding, and powder iodoform thickly over the surface; next to rub the surface with a stick of silver nitrate, making a paste with the iodoform. A small amount of nitric acid is developed in the nascent state from this paste, and has a cauterizing action. Granulations of a healthy character soon appear under the crust which the paste eventually forms. The last method of treatment is that of steam vaporization by means of Pincus' apparatus. The steam is applied through a specially constructed speculum, after scraping away the growth. One-half to one or two minutes is the time suitable for the continuance of the vaporization, and the temperature of the steam is about 105 deg. 110 deg. C. By any of these means the author claims that the discharges are lessened and disinfected, and in many instances recurrence does not take place for a long time, eighteen months, for instance, in one case mentioned.

Collective Investigation of the Influence of the Silver Nitrate Injections on Phthisis.

To the members of the Medical Profession:—In 1892 the undersigned began a collective investigation of the action of cold in the treatment of acute pneumonia and there is reason for believing that this procedure which resulted in gathering four hundred cases of this disease thus treated, with a death rate not quite five per cent. was an important factor in calling attention to the utility of that treatment, and in

introducing it to the profession of this country. That research was based on the conviction that no remedy can be called truly successful until it has passed the exacting crucible of clinical experience, and it is now proposed to apply the same ordeal to the silver—injection treatment of phthisis, which, in a large hospital, dispensary and private practice, reaching over a period of three years, and during which many thousand injections were administered, has given me greater satisfaction than any other method that I have ever employed. In keeping with the above expressed feeling a cordial invitation is herewith extended to those members of the profession who have the inclination and opportunity to investigate this method of treating phthisis and to whom a reprint on the subject with full information and blanks to report cases, will be cheerfully sent on application.

THOMAS J. MAYS., M. D
1829 Spruce Street, Phila., Pa.
August 15, 1901.

Hints on Urine Testing.

Amount and Specific Gravity.—Normally an adult passes in the twenty-four hours from forty to sixty ounces of clear amber-coloured urine of a specific gravity of 1,015 to 1,025, and acid in reaction.

The amount may be greatly increased, and the specific gravity at the same time lowered, by copious drinking, by nervousness or hysteria, and in conditions where there is high arterial tension. A persistent low gravity, even without albumen, is a grave sign of failure in the aged.

On the other hand, concentration of the urine from free perspiration, diarrhœa, etc., may raise the specific gravity to 1,030. In shock or conditions of low arterial tension the quantity of urine passed is diminished, and in the former case it may even be suppressed.

In diabetes mellitus the specific gravity may range from 1,020 to 1,060, but every sample of urine should be tested for sugar as well as for albumen, since sugar in small amounts may often be found in urine with a specific gravity below 1,020.

The proportion of solids in urine may be approximately determined by doubting the last two of the three decimals denoting the specific gravity. Thus, 1,000 parts of urine with a specific gravity of 1,020 contain forty parts of solids, or 4 per cent. To find the quantity of solids passed each day, the entire water passed in twenty-four hours should be collected, and the proportion of solids present in a sample from the mixed bulk estimated by this method.

Urine passed before food is more acid and more likely, on cooling, to throw down a deposit of urates, which are highly coloured and easily dissolved on gentle heating.

Urine passed after meals is less acid, may indeed be faintly alkaline, and is more likely to present a turbidity, due to phosphates. This cloud disappears on adding acid.

Urine for Examination.—The urine should, if possible, be passed in the doctor's presence. It is well to discard the first portion passed (1 to 2 oz.), which may be contaminated by urethral or other discharge.

For the sake of immediate reference the outlines of some of the common tests for albumen, blood, bile, and sugar are given here.

Tests of Albumen—(1) Nitric acid in the cold—Pour into a test tube, says, half an inch of strong nitric acid, then with a pipette run a few drops of the urine on to the surface of the acid. If albumen be present, a white ring appears *at once* at the line of junction.

Caution.—(i) On standing, concentrated urine, to which nitric acid has been added, may become clouded near the *upper* surface by crystals of nitrate of urea.

(ii.) Cupaiba resin is precipitated from urine by nitric acid, but is re-dissolved by heat or by the addition of alcohol.

(iii.) Nitric acid sometimes gives an immediate precipitate of urates, *which disappears on heating*. In this case care must be taken not to have too great an excess of nitric acid; and the presence or absence of albumen should be confirmed by other tests.

(2) Picric Acid Test.—To the urine add, drop by drop, an equal part of a saturated solution of picric acid. The presence of albumen is showu by the clouding of the mixed fluids, which will be proportionate to the albumen present. Peptones, alkaloids, piperazine and urates (when in large excess) are liable to give precipitates with picric acid; but these precipitates are really distinguished from that due to albumen by their disappearance on heating the liquid.

(3) Potassium Ferrocyanide Test.—To a portion of urine in a test tube add citric acid previously dissolved in a little water. If a turbidity is produced, which may be due to *mucin*, the liquid should be filtered. To the clear acid liquid a few drops of a concentrated solution of potassium ferrocyanide are then added. If a white precipitate or turbidity be formed immediately or after a short time, it indicates the presence of albumen.

(4) Heat.—If neutral or alkaline, add *dilute acetic acid* cautiously until the litmus

paper (left in the test tube) becomes reddened. Boil the upper part of this column of urine. Albumen, if present, produces, according to its quantity, a haze, cloud or coagulum, which is unaffected by the subsequent addition of acid.

Faintly acid urine when boiled often becomes cloudy from precipitated phosphates. The cloud disappears, however, on the addition of a drop of nitric acid.

Caution.—If any mineral acid, such as nitric, be added before boiling, acid albumen, which is not precipitated, is formed when the urine is heated.

Tests for Blood.—(1) Microscopic examination of the sediment. This is the most reliable and satisfactory test.

(2) Spectroscopic examination, detection of oxyhæmoglobin.

(3) Guaiacum Test.—To some of the urine, containing the deposit if possible, add one drop of freshly prepared tincture of guaiacum and a few drops of ozone ether, and shake. On standing, the lower layers of the ether become a dark blue if haemoglobin be present.

Note.—Saliva, nasal mucous, and potassium iodide give this reaction.

Test for Bile Pigment.—Gmelin's Test. —Allow drops of the urine and of forming nitric acid to trickle together on a white porcelian dish. If bile pigment be present, a play of colors results: green, blue, violet, red, yellow.

Tests for Sugar.—(1) Trommer's Test. —Mix the urine with half its volume of liquor potassæ. Add a drop or two of a dilute solution of sulphate of copper, and heat.

Even before the boiling point is reached the reddish-yellow precipitate of the suboxide of copper, denoting sugar, will appear. Prolonged boiling may lead to a reduction of the copper salt by bodies other than sugar in the urine.

(2) Moore's Test.—Mix the urine with half its bulk of liquor potassæ, and boil for some minutes. A dark brown coluor indicates the presence of sugar.

(3)Fehling's Test.—Boil the solution first, and then add the urine drop by drop. If no reaction result, continue adding the urine until an amount equal to the volume of Fehling's solution is reached. If sugar be present, a precipitate of suboxide of copper ranging in colour (according to the quantity of sugar present) from light green to yellow or reddish-brown is rapidly produced.

Note.—Albumen interferes with these tests, so that in testing albuminous urine for sugar, the albumen should first be coagulated by boiling and removed by filtering.

Uric acid in excess and other extractive bodies in the urine may lead to reduction of the oxide of copper, if the urine be concentrated. It should therefore be diluted before using Trommer's or Fehling's test.

Since chloroform and other drugs may lead to the reduction of the oxide of copper it is well in any case of doubt to apply a confirmatory test.

(4) Phenyl-Hydrazine Test—Place in an ordinary sized test tube two parts (a few grains) of phenyl-hydrazine crystals and three parts of crystalized sodium acetate. Half fill the tube with urine, shake until the crystals are dissolved, place the tubes in boiling water for thirty minutes, then place in cold water until solution has become cool. Examine microscopically some of the deposit. If sugar be present, the characteristic crystals of phenyl-glucosazine will be seen. These are very fine, delicate, yellow needle- shaped crystals, principally arranged in tufts. This confirmatrory test of the presence of sugar is extremely useful where the reduction is only slight by Fehling's test, or where it is believed that it may have been produced by some reducing substance other than sugar.—*Indian Medical Record*, July 10, 1901.

The Use of Sulphate Copper in Affections of the Cornea and of the Lid other than Trachoma.

J. H. Claiborne (Medical Record, July 27, 1901) says that sulphate of copper in the form of the solid stick is indicated:

In all acute attacks of inflammation of the cornea in which there is thickening with a succulent velvety appearance of the upper lid.

In all recurrent attacks of superficial keratitis in which the same condition of the upper lid prevails.

In infiltrations of the cornea which are the result of preceding inflammations, associated with the same condition of the upper lid.

In maculæ of the cornea in children and adults which have occurred a reasonable time after an inflammation, whether the upper lid presents the characteristic appearance or not.

In chronic conjunctivitis attended by thickening of the lid associated with blepharitis.

In chronic dacryocystitis (particularly in those cases in which the canaliculus has been slit) attended by chronic conjunctivitis.

The Status of Hysterectomy for Uterine Cancer.

C. A. Kirkley (American Gynecological and Obstetrical Journal, July, 1901) says that the radical operation for uterine cancer may be admissible when the disease is seen in its earliest stage, when the diagnosis is most difficult and cannot be confirmed without microscopic examination.

Vaginal hysterectomy is clearly indicated only in adenocarcinoma of the body.

Abdominal hysterectomy is clearly indicated only in cases in which the disease is strictly limited to the cervix and body, or to the body alone.

As only temporary relief can be expected in the vast majority of cases, the operation involving the least risk, and which promises most to prolong life and relieve symptoms, should be the operation of choice.

Electrocauterization has shown better results, should have more extended trial, and when practicable seould have precedence over all other procedures.

Mortality Statistics of New York.

The mortality of the city in the month of June represented an annual death-rate of 17.46, against 18.26 in May and 18.55 in June of last year. The greatest reduction in the deaths from any one disease was in the case of pneumonia, the weekly average of deaths from which declined to 89, from 130.5. in May. The lowest mortality of the present year from this disease was reached in the week ending June 22, when there were but 81 deaths reported from it. The weekly average of deaths from scarlet fever declined from 44.5 to 33.5; from typhoid fever, from 7.05 to 6.25; from bronchits, from 31.75 to 19.75; and from influenza, from .5 to 2.25. During the week ending June 15 there were no deaths reported from influenza, and this is the first time in the year that this disease has not appeared as a cause of death in the weekly reports of the Health Department. Among the diseases in the mortality from which there was a slight increase were the following: The weekly average of deaths from diphtheria and croup increased from 44 to 45.75; from meales, from 8.5 to 10; and from smallpox, from 13.75 to 15.5. With the advent of summer a more marked increase in the mortality from diarrheal diseases was of course to be expected, and the weekly average of deaths from this cause increased from 41.75 to 59.75, while the weekly average of deaths from diarrheal diseases in children under five years increased from 35 to 49.5. There was also a considerable increase in the deaths from cancer, the weekly average of which rose from 41 to 47.75. The weekly average of deaths from phthisis (150) and from diseases of the urinary system (102) remained just the same as in the month of May.—Boston Medical and Surgical Journal.

Intermenstrual Pain.

This pain, says the Denver Medical Tims, August, 1901, is referred almost invariably to one or the other ovarian region, sometimes changing sides from month to month. It is distinctly paroxysmal and intermittent, not affected by change or posture. The attacks usually last from two to four days, and may occur at any time in the intervals of menstruation. The pathogenesis of this affection is ascribed to slow inflammatory changes in the ovary, which is rendered so dense as to make difficult the ovule from the deeper layers, which occurs hypothetically at a definite date for each woman. The pain is, therefore, believed to be due to tension about the growing follicle, and it ceases abruptly when the latter has fought its way to the surface of the ovary and is free to ripen and rupture. Another theory, perhaps more tenable, is that the pain is caused by ovarian adhesions placed upon tension by the periodic recession of the menstrual blood pressure, which reaches its climax about the middle of the intermenstrual period. Such patients are relatively, but not absolutely, sterile. Treatment is inefficient. Some writers report benefit from tampons of ichthyol and boroglyceride and the prolonged use of iodine, arsenic and mercury. Anodynes must be used during the paroxysms.

Cystadenoma of the Pancreas.

Dr. Jos. Ransohoff (American Medicine, July 27, 1901), reports two successful operations for this condition. One was 12 years ago; the last in 1900. This patient was aged 28, Irish, tumor of six years growth. Operation made October 12, 1900. Incision from xyphoid cartilage to umbilicus through thick abdominal wall. On retracting the margins of the wound there was exposed a large pearly cyst. On inspection, the stomach was seen above, the transverse colon with the mesentery in front and below the growth. In the gastrocolic ligament, which was spreading out over the tumor many veins from the size of a broom straw to that of a quill were seen. The great omentum was next drawn into the wound to determine whether by division of the lower layer of the mesocolon the tumor could be gotten at. When this was found impracticable, the omentum was returned into the cavity and held in place by gauze

packing. The gastrocolic omentum was next divided for the distance of 7 inches along the greater curvature of the stomach, after a large number of ligatures had been applied to the veins above mentioned. The tumor was thus exposed between the stomach and colon. On puncture with a large trocar 3 quarts of chocolate-colored grumous material were removed. The cyst was then gradually drawn into the wound from between stomach and colon, adhesions being carefully spread and tied off as required. As the cyst wall was g adually drawn out its pancreatic origin was made certain, for on its surface there was displayed a very large number of flattened lobules of the gland-structure proper. It is impossible to state how much of the pancreas was removed with the cyst. When most of the cyst had been drawn into the wound it was found that the removal of the entire thickness of the entire wall might endanger the splenic vein. For this reason a pedicle was made of the pancreatic tissue about the sac and six feet above the central part of the incision. To prevent hemorrhage a clam was placed under the pedicle in addition to usual Staffordshire ligatures. Before the stump was fiixt in the abdnominal wound the relations between the colon and greater curvature of the stomach were restored by the gastrocolic ligament. What little of the sac was left in the stump was destroyed with the thermocautery. The abdomen was closed in the usual manner. Time of operation, 1 hour. Subsequent history: During the first 48 hours, symptoms were somewhat stormy, chiefly on account of vomiting, which lasted during nearly 48 hours. The pulse-rate ran up to 128 on the first and second day; from that time on it reduced in frequency and gradually returned to normal. Highest temperature reached was 101½ on third day. The forceps were removed October 15. Wound healed except for slight serous oozing from the stump. Eschar left by the thermocautery came away on the fifth day, when it was observed that the stump had already greatly contracted and retracted deeply into the abdominal wall. In three weeks it had cicatrized over entirely and the patient left the hospital just four weeks after the operation.

A Case of Primary Carcinoma of the Vagina.

Gill in The Lancet, June 1, says: The patient was a healthy-looking woman, age about thirty years, who had requested her husband to call upon me to get a lotion for the whites, but for which I declined to give a prescription without seeing the patient. The writer found that the discharge was often tinged, and that there was frequently pain and some hemorrhage upon coitus. On examination about two inches within the vagina was found a cauliflower-like growth about the size of three walnuts, with a base the size of a florin. There was no thickening around the base of the growth as demonstrated by placing a finger in the rectum and one in the vagina. Beyond the growth the vagina, as well as the cervix was perfectly healthy. Several glands in both groins were enlarged and tender. The growth was removed by a circular incision, and the glands in the groin were also removed. The growth returned in less than a month and spread to the tissues above so that a constriction of the bowels was feared. The patient afterwards developed disseminated masses under the skin of the abdomen. Microscopically, the growth was found to be cancerous.

The routine examination of women following confinement is recommended by John Cooke Hirst (Philadelphia). The examination should be conducted about six weeks after the date of delivery. At this time, under normal conditions, the pelvic organs have returned to about their normal size and state. The objects of investigation should be: the presence and character of any vaginal discharge, the condition of the perineum and pelvic floor, the condition of the cervix, the position and degree of involution of the uterus, the condition of the broad ligaments, tubes and ovaries, and finally a specular examination of the vagina and portio.

If some abnormal condition has been found, the patient should be immediately advised to have the proper treatment. Thus it may become impossible for a patient in going to another practitioner for some pelvic trouble, to blame the first doctor for negligence in the manner in which he conducted the confinement.—International Medical Magazine, March, 1901.

Insurance Against Malpractice Suits.

A New York insurance company proposes to insure medical practitioners against losses by malpractice suits. It bases its action upon the assumption that when it becomes generally known that physicians, surgeons and dentists are thus protected, there will be less inclination than there is at present on the part of speculative lawyers to bring such actions against members of the profession.

Tightness and oppression in the chest calls for potass. bichromate.

Statistics of Cancer.

Some idea of the prevalence of cancer on the continent can be gained from the interesting note published by George Heimann, of Berlin. He says according to the Interstate Medical Journal that the percentage of death from cancer in the kingdom of Bavaria has increased from the year 1890, when it was 8.1 to the 10,000 inhabitants to 10.2 to 10,000 inhabitants in 1899. This increase is partly due to the fact that more cases are being recognized now by the clinician and principally by the pathologist at autopsy than formerly. In addition, the precentage has increased at the rate of 40 per cent., in women at the rate of 34 per cent. In the year 1899 in the district of Swabia the mortality rate from cancer was 13.6 per cent., in upper Bavaria 13 per cent., in Pflaz between 7.2 and 7.5 per cent. In the Rhenish district the mortality in the cities was 13.4, in the country 9.7 per cent. In Munich it was 14.7 per cent., in Nurmberg 13.6 per cent. The number of cases which are now treated in the hospitals of Germany has considerably increased.

These figures show conclusively that cancer is increasing steadily. Should we make similar investigations in this country, the same state of affairs could probably be ascertained. In goses without saying that there is more operative interference in the case of cancer, partlcularly as it occurs in women, but who can say that it cuts down mortality? It is true that there is a temporary relief, but all these patients ultimately die of metastatics disturbances, referable to the original cancerous condition. Even though such bloody and protracted operations as Halsted's operation for cancer of the breast are faithfully carried out, we know that the very fact that it is expedient to go into the cervical glands to extirpate them means that extension has already taken place, that probably the pleural lymphatics are affected and metastasis extremely liable to occur. In short, we may say that we are at the rope's end in this regard: and we will remain there until more light is thrown on the etiology of the disease. We may still hope that that etiology which is correct may still be discovered, even though attempts in this direction have been hitherto attended with but scant success.

The Pathology of Sunstroke.

The editor of the Medical Record states that when death is sudden the condition appears to be either that of syncope from simple failure of heart actions, or from directs hock to the cerebral and respiratory centers. The latter, or asphyxial form is most common and most rapidly fatal. In the more gradual hyperprexial variety the cerebral lesions are usually quite pronounced, including evidence of meningitis,serous effusions into the ventricles, occasionally hemorrhages into the brain substance and engorgement of the venous system with dark, fluid-blood. In general the attack is simply over-stimulation of the respiratory and circulatory centers by heat, followed by eventual exhaustion

Where to Settle.

This interesting subject is discussed editorially in the Medical News,Aug 10, 1901. The editor says:

This unusually puzzling and all important question is occupying the minds of at least some hundreds of recent graduates in medicine. There are naturally, many circumstances that must be taken into account in its answer.

So far as the material elements of the problem are concerned, the recent census furnishes some interesting statistical considerations. The number of inhabitants to doctor in this country is not large. There are for each physician only 1,215 people. In many States the number of inhabitants to each physician is much lower than this. Some of the states and territories are especially scant in the provision of physicians for possible patients. It might seem that in some of these inadequately-supplied states the recent graduate in medicine would find a welcome that is only too long delayed in regions medically better provided for.

Mississippi, for instance, has but one physician to every 1,548 inhabitants; New Mexico, one to every 1,406; North Dakota, one to every 1,347. There are more than 1,100 inhabitants to each physician in North Carolina, Minnesota and Wyoming. Utah, South Carolina, and Louisiana have more than 1,000 to each physician. On the other hand, the District of Columbia has but 325 inhabitants to each physician; California has oniy 392 people to go around to each doctor; Colorado, only 462; and Vermont, 477. In the case of California and Colorado,their reputation as health resorts evidently accounts for their surplus of physicians. Besides their normal number they have those from all parts of the country whose health requires their residence in an equable climate.

Among others of the states there are a number of supprises in the mode of distri bution of physicians. Kansas, for instance, has one doctor for every 510 of population. Indiana comes next with one to every 519 inhabitants. Then Ohio with one to 529;

Missouri, with one to 543; Iowa, with one to 562, Arkansas, one to 569; Massachusetts and Michigan, one to 575, Illinois, one to 583; and New York one to 596.

Prof. Thwing of Western Reserve University said not long ago that there was only one profession at present open to yong men in which they could expect to make their living from the very beginning of their professional career. This is dentistry. According to the census figures, there is only one dentist to every 10,000 of population. Like the physicians they are thickest at the Capitol. There is in Washington, D. C., one dentist for every 1,250 inhabitants. Health reasons disturb the normal equilibrium of dentist distribution, as it does that of the physicians, and so Californina has one dentist to every 1,500 inhabitants. Massachusetts comes next in its support of the dental fraternity, about every 2,000 inhabitants providing a living for a dentist. New Hampshire, Vermont, Oregon, Illinois, Connecticut, Ohio and New York followed closely on Massachusetts in this respect.

For physicians it is evident that we have nearly reached the limit of professional numbers as far as medicine can be practised with due hope of economic success. It is evident, too, that the ranks of the dentist are rapidly filling up and that even now there are many places, especially in the more thickly-populated districts, where a dentist cannot expect to make a living for several years after he hangs out his sign.

Practical Blood Examination.

The scope of practical blood-examination at present is stated by H. F. Hewes (Boston Med. and Surg. Jour., Aug. 1, 1901) as follows:

The determination of the existence or non-existence of anemia and, if present, of its severity and type. The determination of leucocytosis, its extent and type, including the diagnosis of myelogenous and lymphatic leucemia. The determination of the presence or abence of blood-parasites, including diagnosis of malaria, filaria sanguinis hominis, and relapsing fever. The determination of the existence of definite serum reactions as the Widal test for typhoid. The determination of the presence in the blood of bacterial organisms; that is, of septicemia. Nine-tenths of all clinical blood-work may be done by the employment of two very simple methods of examination, namely, the estimation of the hemoglobin and the examination of a stained specimen of blood. The examination of fresh specimens of blood and the use of counting methods furnish added knowledge, which, however, is frequently not necessary for diagnosis. More recently developed methods of equal practicability as yet lacked the testimony of extended experience in regard to their usefulness. The most important and promising of these methods is the test for iodophilia, said to be of value in conditions of suppuration (except in tuberculosis) and in croupous pneumonia.

Fecal Tumors.

The Denver Medical Times says that these collections, may give rise to errors in two ways: First, in simulating new growths; and secondly, in causing existing new growths to appear larger than they really are. In such cases, usually, the diagnosis cannot be made at once, but only after observing the effect of internal laxative measures. The consistence of the growth, as a rule, gives a useful diagnostic hint, since, apart from the so-called enteroliths, fecal tumors are generally somewhat doughy and retain the impression of the finger, especially after rectal enemata of oil or soap. Even after such enemata the peripheral portion of the feces may remain hard and simulate a tumor, notwithstanding that frequent voluminous evacuations have taken place. This experience, says Boas, which has been that of absolutely reliable clinicians, call for the greatest caution in the determination of the nature of doubtful tumors. The diagnosis can usually be determined, especially upon repeated examinations, though Nothnagel reported a case in which everything indicated cancer of the cecum, while autopsy showed an ulcerative tubercular stricture in the beginning of the ascending colon. Gerouny claims that the difficulties in diagnosis of fecal tumors have been overcome by the discovery of what he terms the "adhesive sign." If the finger be very firmly pressed upon the fecal mass, the intestinal mucous membrane will become adherent to the viscous feces, becoming free again when the pressure is discontinued, and one can feel the mucous membrane loosening itself.

Professional Secrecy Violated.

A Paris physician was recently fined 200 francs and sentenced to pay the plaintiff in a suit against him 1,000 francs damages. The plaintiff was taken suddenly ill at the house of the parents of his fiance, and in response to the questioning of the young woman's mother the doctor told her the nature of the patient's illness. This led to a breaking off of the engagement, and the young man sued the physician for breach of professional secrecy, with the result as stated.

Gray's Glycerine Tonic Comp.

Everybody knows the condition—it's so common and rebellious; some physicians call it general debility, or malnutrition, or nervous exhaustion, or a host of other names. Whatever its name or its cause, there exist the very striking facts that the blood has been impoverished, the nervous system ravished, the vitality sapped out. It would seem extremely rash to make the statement that any one remedy is equally efficacious in all of these cases, particularly so when the usually employed tonics—iron, strychnine, cod liver oil, etc.—have utterly failed. Yet such is the statement of thousands of physicians whose names are everywhere the synonyms for eminence, integrity, ability; physicians who represent all that is best in ethical, scientific medicine. It is this class of physicians who make the unqualified assertion that Gray's Glycerine Tonic Comp. is uniformly effective in malnutrition, general debility, nervous prostration—whether the condition accompanies organic disease, acute infectious diseases or exists without ascribable cause. Gray's Tonic begins aright in these cases; it makes a friend of the rebellious stomach—makes it docile, receptive, retentive. The patient improves from the start—has more strength, less depression and exhaustion. The physician notes the patient's ability to eat, digest and assimilate food—the dormant nutritive functions seem to assume new life. The blood rapidly regains the necessary elements for healthful nutrition of the entire body—the red blood corpuscles and hæmoglobin increase hand in hand; nervous force, vitality, is re-engendered; irritability, sleeplessness and exhaustion disappear. Restoration of constitutional vigor and return to health is but a natural sequence; it usually results in a surprisingly short time. Skepticism as to the truth of these facts may be entertained by those who have *never* given Gray's Tonic a fair clinical trial; but with those physicians who have tried the remedy, skepticism has yielded to the inexorable verdict of facts—actual, accomplished results. The experience of countless physicians leaves no ground for doubt that Gray's Tonic is the remedy *par excellence*—the pleasant, uniformly effective remedy—in waste of tissue and impoverishment of blood and vitality. Its *rapidity* of action is especially noticeable in convalescence from typhoid fever, la grippe, pneumonia and other exhausting ailments. Its uniformity of action is a certainty in all.

Heleborein produces local anesthesia. It is said to exceed cocaine.

There is a class of cases becoming quite common to the general practitioner, and can be grouped under the following: Symptoms—Malaise, headache and a feeling of weakness on arising in the morning, impaired appetite, faulty digestion, easily fatigued, vauge pains in the limbs and back and to many of our business men, want of concentration of mindto their work,nervousness, broken sleep at night, easily worried, mental inability to carry out their accustomed duties. The finer instruments of precision fail to reveal any symptoms. The heart beats are normal in time, but a little weak, the temperature is slightly above normal, the reflexes are normal, and when we come to inquire into the habit of these persons we find that they eat their meals hurriedly, they are large consumers of tea, wine or beer, are largely addicted to smoking, they fail to answer the calls of nature regularly, they have a slightly coated tongue. What is the cause of all this? The food being improperly masticated, the gastric juice being largely diluted by means of the fluids drank,the gastric mucous membrane being strongly congested by the large amount of ice water, ice cream and soda water consumed, is kept in chronic state of congestion, and the digestive functions are thus crippled and the food is undigested, fermentation and decomposition follow, resulting in the absorption toxins and leukomains,and these circulating in the blood are brought into contact with the tissues and nerve centre.

It is an old saying, but a true one, that "many a person is digging his grave with his teeth." Their eating hastily and their indulgence in these iced beverages are largely responsible for the cause of the cases to which we have called attention.

Not much has been written on this subject, it being considered too trivial for interest, but yet it is one of the most common affections the physician is called upon to treat. Patent medicine men and quack doctors have learned this fact far in advance of the regular practitioner, and have made much capital and out of their advertising all manner of cures for these conditions. It behooves us as medical men to pay more attention to the slight ailments than we have heretofore. Many years ago Dr. Beal, of London, published a book on "Slight ailments," and in that book are many rules and directions for treating just such cases as we have called attention to, but any physician who will have crrried out by his patient the ordinary rules for eating and drinking can do much toward the alleviation of these sufferers.

Diversion, Ethics and Ambition.

The California Medical Journal for August, under the above heading, discusses this subject in rather an interesting way:

The statement that doctors are shorter lived than the members of other professions is warranted by the facts. Is it because they seldom laugh? Victor Hugo's "L'Homme Qui Rit" certainly was not a doctor of medicine. As a class, with a few exceptions, medical men are so hemmed in by a kind of stilted code of etiquette, that they can hardly be expected to enjoy good health, for lack of natural relaxation and the wholesome influences of those sweet amenities that go so far toward making human existence worth while.

Though it is admitted that medical men represent one of the learned and admittedly diginified and very responsible professions, an unsophisticated layman, listening to the usual medical essay as read, either with stumbling hesitation, idiotic punctuation or absolutely no rhetorical expresions; or else with stilted pomposity that makes it sound like a school-boy's first attempt at a funeral oration, might well make the criticism and wonder at the proverbial gravity and stern decorum of medical men. And when one considers the usual audiences before which these scientifically lugubrious dissertations are exploited it would be excusable to assume that for a medical professor to smile or to perpetrate a deliberate pun would constitute a crime worthy of capital punishment under the code.

Why should the medical, only, of all the professions, be for ever done up in starched stomachers and stuck upon stilts?

The literary man belongs to his clubs and has his carte blanche to unbend in all social circles; the judges on the bench, the advocate at the bar—even the man of God in his clerical robes—all these at times throw off their formal airs, shed their unwonted dignity, as the snake sheds its skin, and give themselves over to social relaxation. Our "adriondack" Murrays, with their fast horses, buckboards and beautiful women; our Beechers, Tiltons, Talmages and Downs, all found a following of exculpators and apologists; but where is the clientele to stand by the medical suspect accused by blackmailing husbands, hysterical wives, or prudish old maids? The busy medical practitioner is practically at the mercy of every social wind that blows, the prey to every scheming man and neurotic woman, of every eccentric monomaniac and social crank that rnns at large. He is never quite sure when an hour of the day or night is his own. If he presumes to partake of the good things of the world he must be content to recieve his blessings, as it were, at the point of a hypodermic needle or by cutaneous absorption. Even his conjugal seances—of course he must marry—are at all times subject to sudden and unseasonable interruption; and sometimes a breath of undeserved calumny, or the morbid imaginings of a hypochondriac or hystero-epileptic are sufficient to damn his reputation forever.

The truth is, medical practice is not yet on a business basis, aud prevailing medical ethics are a standing illustration of how not to do it. If the priest or Levite discovers a new process or product, or learns a new application of an old principle, if the scholar, the judge, the briefless lawyer or the theologic expounder, brings out a fresh idea or a new way of utilizing an old one, the Patent Office or the Librarian of Congress issues him a perpetual caveat; straightway he deserts his calling and becomes a bloated patient-right monopolist, with the whole power of the State or the notional government standing at his back to ward off eavesdroppers and bandits.

How is it with the hard-worked and unpaid medical discoverer and inventor? Even though he should produce a contrivance that would forever banish all pain from the universe, render mutual labor a thing of the past, blot out evil and poverty from the face of the earth as sunlight banishes darkness, and prolong human life to the rounded period of a thousand yeurs, yet if he be ethical, must he publish it all without money and without price, in the next issue of the Medical Oracle, with working, drawing and every ingredient and process accurately weighed and described, to be used by every competitor and every charlatan.

The medical practitioner is unlike other professional men in that he is not allowed to choose whom he will serve. In other words, he must respond with equal alacrity at the beck of all, rich or poor, honest or dishonest. For him there is no lighthouse signals, no moral or commercial Bradstreets or Duns to forefend him from dead-beat shoals and confidence rocks, and no courts of equity to recoup his reputation or award him damages for abuse, heaped thickest by some of the very ones for whom he has done the most and who have paid him the least. Verily he is compelled to cast his pearls before the world's swine; and when they turn and rend him the same world usually sneers or looks on with a "good-enough-for-him" complaceny. In short, there is for him an unwritten law—usually called "moral," but often diabolical—that compels him to squander time, brains, mid-

night oil, and his astutest skill, to the end that he may avoid suits for malpractice by serving and saving some very good, but too often ungrateful people, along with a good many worthless shysters who seem to live for the sole purpose of abusing the doctor and procuring medical services under false pretenses. Again, the merchant sheds oceans of printer's ink, and finds in it his business sheet anchor; the lawyer is permitted and expected to blow his own horn, night and day, before every judge, jury, courtroom crowd, and political gathering; the judge on the bench is placarded in all the dailies, and utters pettifogging decisions to gaping crowds; even the man of the cloth, the follower of the meek and lowly Nazarene, has the benefit of his Thursday evening sewing circles, all the sociables, house to house visiting, and full swing from his pulpit on Sundays. No one will question his going and comings if he makes a little personal and professional capital out of public meetings, political conventions and agricultural "hoss trots." He may even avail himself of that acme of American impudence and cheek—the reportorial interview, without losing caste.

The physician who presumes to avail himself, be it ever so modestly, of any of these avenues to acquaintance and popularity unless he be one of the luckey few who have already acquired both fame and filthy lucre (no matter how), will find himself butting his silly brains out against the ramparts of the sacred and equally silly code. This confused collection of ridiculous contradictions invented for the mediocres rather than the mighty, alleges in dignified cadences that "it is derogatory to the character of the physician" to adopt business methods in announcing his qualifications to the public. He must resolutely hide his light under a bushel, must never mention to his nearest friend such favorable facilties as have fallen to his lot, must never advert to the extent of his experience, nor divulge the nature of any discoveries or improvements which he may have made. To display any semblence of commercial enterprise or common sense business constitutes a professional blunder for which he is held amenable and subjected to ostracism.

In short, for the professional medicus bursting, perhaps, to tell the world how to do some one thing in a great deal better manner and far less time than it has ever been done before, there are only two "ethical" avenues open. He may establish a medical college (which is not needed), found a hospital for green young sawbones to experiment in, invent an obstetric forceps or lithotrite; or he may adopt the easier course and sell certificates to manufacturers, verifying the claims for purity, superiority and efficacy of all the multiplying examples of lacto pepto-pancriatized emulsions of saccharated sourkrout!

One thing more; he may have printed on the lower left-han corner of his business card, in type so punctiliously small that nobody will ever take the trouble to read it: "Practice limited to diseases of the pyloric orifice of the Galenical gizzard;" or "Specialty—Latero-posterior enucleation of the healthy appendix; or, X-ray illumination of congenital femurs, with reporters as paid assistants." All this is quite legitimate, quite ethical and quite acceptible to the superannuated great-grandmothers who still recite parrot talk platitudes at our association meetings; If the aspirant for recognition and honor does not encroach upon the territory which the Great Ones may conceive to be included within the very elastic boundries of their so-called specialties. Should he be so bold and indiscreet as to do this, then will the gentle bleatings of the sheep be changed to the fierce snarling of wolves, and the Ambitious One will become no longer ambitious, but will spend his days in silent meditation upon the peculiarities of the Code.

"Acid" and "Neutral" Glycero-Phosphates

By Edmond Gros, M.D., Paris.

Many, if not all diseases—zymotic or otherwise—are due to an impaired equilibrium in the mineral equations of the body.

Let too great a loss of some of its normal constituents take place—such as phosphorus, arsenic, iodine, sulphur, etc., without a corresponding income of these elements derived from food, and the tissues lose their vital resistance and are liable to become a prey to microbic diseases. We too often lose sight of these facts, and have too great a tendency to ascribe all diseases to germs alone; we forget the soil, and that we can no more surely attack the germ than by modifying the soil on which it grows.

Let us take, for example, those conditions in which phosphaturia is the dominant symptom. There is here, to use a favorite expression of Prof. Albert Robin, "a veritable *leakage* of phosphorus," and if this is not promptly restored by the food or medication, the direst state of things occur—neurasthenia, osteomalacia, rickets, idiocy, are a few of the ills resulting from the loss of this important element.

For the ordinary form of phosphate of lime, so insoluble as to be almost devoid of action, Longet, Wurtz, Rabuteau, Churchill, etc., substituted the more soluble

chlorhydro-phosphate, hypo-phosphite and lacto-phosphate.

In 1889, Brown-Sequard startled the world with his discovery that the pulp of testicles had a wonderfully vivifying action. The hopes offered by this too optimistic *savant*, caused him to be looked on with suspicion by many of his contemporaries, and yet it is due to him that the glycero-phosphates are so extensively and successfully used to-day, for the spermatic fluid contains a highly concentrated form of the various glycero-phosphates, in organic combination.

Dr. Albert Robin has made himself the champion of the glycero-phosphatic medication, and claims that when administered hypodermically or by the mouth, exactly the same results obtain as with the injections of Brown-Sequard. He showed that the urine of neurasthenics contained a large quantity of phosphorus, in the form of glycero-phosphates, and deduced from this, that it would be advisable to administer phosphorus in a form as readily allied to that of the organism as possible. In hands of Dr. Robin the glycero-phosphates increased the quantity of urea, chlorides and sulphates; the only element which is not increased but rather diminished, is *phosphorus*, which proves that the glycero-phosphates are not only totally absorbed, but also have a tendency to stop the morbid eliminations of phosphorus from the body. Moreover, he found they exercised a powerful stimulation over the various organs through the medium of the nervous system.

We have been speaking of the glycero-phosphates in general, but a distinction should be made between the neutral and acid salts.

Dr. Bardet (Comptes rendus de l'Academie des Sciences, April, 1900,) found the dynamogenic action of the *acid glycero-phosphates* far superior to the *neutral* in intensity of action and rapidity of absorption. In small doses the acid salts exert powerful stimulating action on the general organism; in large doses they are purgative like phosphate of soda, but in addition to this, they exert a marked cholagogic action, and aid the digestion of dyspeptics.

Dr. Robin's admirable communication to the Academy of Sciences (Paris) will serve us as a model on which to trace their therapeutic indications, viz:

1. In all cases where there exists a diminution of the nitrogenous exchanges, in a word, wherever there is retarded metabolism.

A.—In chronic gout and diabetes in the stages of cachexia.

B.—In obesity with diminished elimination of urea.

C.—In pulmonary phthisis to stimulate the resistance of the organism to the bacillus.

D.—In chronic Bright's disease.

E.—In albumino-phosphaturia.

F.—In dyspepsias, attended with hypochlorhydia.

G.—In senility, to intensify nutrition.

H.—In chlorosis and anemia.

I.—In osteomalacia and rickets.

2. As a reconstituent of the nervous system, in all cases of nerve prostration. In neurasthenia and in the convalescence of wasting diseases—such as typhoid, grippe, pneumonia, etc.

The glycero-phosphates of commerce are very unreliable and unstable. The irregular solubility of the dry "*neutral*" forms of the *glycero-phosphates*, and their sometimes apparently weak action, is due to a partial decomposition, which has transformed them into simple phosphates or insoluble inert substances, hence it has been found that a solution of the *acid glycero-phosphates in glycerine*, according to Huxley's formula, offers the greatest stability, and allows them to *permanently* retain all of their most active properties.

This syrup is most reliable for general practice, on account of the chemical purity of its constituents, and their uniformity and permanence in all climates.

Each fluid drachm or teaspoonful of the syrup (free from sugar), represents four grains of the Glycero-Phosphates of Lime, Soda, Potash, Manganese and Iron with 1-250th of a grain of Strychnine, in exact physiological proportions.

The acid glycero-phosphates being more efficient than the neutral salts, preference should be given to Huxley's formula for the syrup; they cannot moreover be given in the dry form.

Camphor in the Treatment of Varicose Ulcers.

Camphor is a drug which for many years was held in great esteem, especially in extra-professional circles, indeed the late M. Raspail founded a school of therapeutics which still rejoices in great popularity in France, based on the use of camphor internally and externally as a curative agent. Its anti-spasmodic properties, though well authenticated, have of late fallen into disrepute, or at any rate into disuse, and externally it is only employed in this country in the form of a liniment of which it is but a subsidiary constituent. Two German physicians have recently called attention to the value of camphor dressings in promoting the cicatrisation of varicose ulcers of

the legs which are notoriously refractory to treatment. They make use of an ointment containing 2 per cent. of camphor with from fifteen to twenty parts of oxide of zinc, or, if this be found too irritating,they prescribe a mixture of two parts of olive oil. An alternative application is a solution of the drug in spirit, but this must only be applied after the ulcerated surface has been thoroughly cleaned of scabs and crusts by poultices. It is asserted that under this treatment the most obstinate ulcer will cicatrise within three weeks, which is more than is claimed for the much lauded oxygen treatment,over which, moreover, it has the advantage of being more generally applicable at a vast smaller cost. —*Medical Press.*

Cough.

A Simple faith in the efficacy of cough mixtures is apt to be rudely shaken by the study of the numerous reflexes through which the exciting impulse may travel, independently of pulmonary and bronchial irritation. We are told that there are fourteen recognisable varieties of useless cough, that is to say, cough which has not for object to rid the respiratory apparatus of irritating secretions. It is a matter of clinical experience that quite a number of coughs are caused by some abnormality in the nose, ear and throat, while others are, with equal plausibility, ascribed to disordered states of the stomach or some other distant organ. This fact adds singularly to the difficulties with which the physician has to contend in his endeavour to ascertain the source of, and to relieve, the cough. One of the most fruitful sources of reflex cough is the presence in the nose or pharynx of varicose veins or some form of local hypertrophy, consequently the examination should commence in these regions. The root of the tongue is a common site of varicosities, but the epiglottis is often involved,and if success is to attend our efforts to relieve local treatment is indispensable. Apart from obvious structural changes, the existence of hyperæsthetic areas on the nasal mucous membrane and on that of the vault of the pharynx may and do determine a dry, irritating cough, exceedingly difficult to subdue, except by the discovery and treatment of such areas. The probability of a cough being of reflex origin may be inferred when it is spasmodic, practically constant, and accompanied by little or no expectoration, especially when signs of pulmonary disease are absent and when the symptoms persistently resist all medication for permanent relief. The presumption is strengthened if the general health is not thereby obviously affected, and the diagnosis will be absolutely confirmed when, upon removal of the assumed cause, it promptly disappears.—*Medical Press and Circular.*

Ten Commandments

For the nurses in the sick chamber, not by Moses, but by G. E. Potter, M. D., Newark, N. J.,

1. Thou shalt remove surplus rugs, furniture, etc., and make ample room for your work.
2. Thou shalt maintain perfect ventilation without draughts.
3. Thou shalt keep the patient clean and quiet.
4. Thou shalt foresee the needs of your patients, don't let them ask for everything.
5. Thou shall promptly remove and burn all sputum and thoroughly disinfect all culinary utensils and vessels used by the patient.
6. Thou shalt restrict visiting, loud talking and above all whispering in the sick chamber.
7. Thou shalt not ask the sick what they want to eat; rather say, "I have prepared something dainty, and I want you to eat it."
8. Thou shalt not annoy the sick by telling your troubles, sad experiences, and *all* you know.
9. Thou shalt let in the sunshine and try to be a sunbeam yourself.
10. Thou shalt remember that the ten commandment is to mind your own business, follow directions faithfully, cheerfully and promptly, and the sick will arise and call you blessed.—*Electric Medical Journal.*

A doctor in Texas clams that immediate relief from the desire for whisky can be obtained by dropping a few drops of tincture of cinchona on the root of the tongue. The common belief of the profession, a few years ago, was that the tincture of red cinchona was a specific to the whisky habit.

In operations on alcoholic subjects it is often necessary to watch the patient carefully, because delirium tremens may occur after any severe injury or operation, even in patients who have not touched alcohol for several weeks.

The preparations of "Pepsin," made by Robinson-Pettet Co., are endorsed by many prominent physicians. We recommend a careful perusal of the advertisement of this well-known manufacturing house. (See page vi.)

Notice-- SANDER & SON EUCALYPTOL is in valuable in inflammation of the mucous membranes, and in all septic and infectious diseases. Apply to Dr. SANDER, Belle Plaine Iowa, for sample and literature of Sander's Eucalyptol. Meyer Bro.'s Drug Company, St. Louis, Mo., Sole Agents.

Sanmetto in Enuresis.

I used Sanmetto in a case of a young Miss, thirteen years of ago, who was becoming a regular "wet the bed." I had tried all the usual remedies, but failed to make a cure, so I tried Sanmetto and the result was a perfect cure, as she has not been troubled since the first treatment with Sanmetto, and I inquired to-day, and was informed that she had attended school, traveled two hundred and fifty miles, losing two nights sleep, but not once has the trouble returned; therefore, I call it a cure in every sense of the word, and another triumph for Sanmetto. I can say that in over forty-six years of practice I have never found a medicine that is as near a specific for the purposes intended as Sanmetto.

WM. H. ANDERSON, M.D.
Soda Springs, Idaho.

An investigation of the Baltimore Hospitals has been undertaken by the Mayor of the city, on account of the case of a man who died in jail of alcoholism after admission at a number of hospitals, including Bayview Asylum, the city institution for poor people, had been refused to him. The man was found in the street acting as though insane, and suffering from a cut over one eye, having been knocked down by a wagon. He was taken to the Baltimore University Hospital, but the officials there refused to allow him to remain. The patrol wagon then carried him to St. Joseph's Hospital, where admittance was also refused to him. The City Hospital would not receive him because, it is stated, the institution was full. Johns Hopkins Hospital also refused to take him. Two hours after the man was taken to jail he died.—*Medical Record.*

To demonstrate solubility, drop one in water; it will disintegrate in thirty seconds.

Antiseptic Sphenoids

The Twentieth Century Treatment for

Vaginal and Rectal Troubles.

ANTISEPTIC. ASTRINGENT. CURATIVE.

One each night, introduced into the vagina well up to the uterus, gives prompt and permanent relief in all forms of Vaginal Catarrhs, whether specific or non-specific. For Hemorrhoids and Sphincter Troubles, cover with petrolatum to facilitate insertion. **Send for Free Sample and Literature.**

PRICE, in One-Half Gross Boxes, $1.50; Postage Paid.

McCOY, HOWE CO.

Manufacturing Chemists, Indianapolis, Ind.

Lavage.

Musser calls attention to the abuse of lavage when left in the patient's hands, and says that not five per cent. of the cases of gastric disease under his care have required it. If he employs it, he prefers to do it himself or have a medical man to do it. To allow patients to do it soon develops in them a habit.—*Therapeutic Gazette.*

The late Justice Smyth, of New Yorh, who saw about as much of the trial court as any judge of modern times, once said:

"I cannot understand why it is that doctors are about the worst witnesses I know of. They are really the very worst witnesses I ever met, with one exception, and the exception is the lawyer. Doctors and lawyers are very bad witness. They don't know how to give a direct answer to a simple question.—*Dietetic Gazette.*

Tightness and oppression in the chest call for potass. bicromate.

NEW ORLEANS POLYCLINIC.

FIFTEENTH ANNUAL SESSION OPENS NOVEMCER 4TH, 1901.

Physicians will find the Polyclinic an excellent means for posting themselves upon modern progress in all branches of medicine and surgery. The specialties are fully taught, including laboratory work.

For further information, address DR. ISADORE DYER, SECRETARY, NEW ORLEANS POLYCLINIC, Postoffice box 797, New Orleans, La.

Fads in Medicine.

A fad in medicine may be defined to be a trivial fancy adopted and pursued for a time with irrational zeal, or a matter, whether important or unimportant, imperfectly understood and taken up and argued with more zeal than sense. Fads of this kind are certainly more common in medical matters than in any other department. Although the tenacity and frequency of such fads are usually in direct proportion to the ignorance of the faddist, we are fain to admit that a tendency to fads is occasionally met with even among the followers of Æsculapius themselves. Every new remedy introduced with a flare of trumpets into therapeutics, becomes for a time the subject of the faddist, but this, perhaps, is more or less inevitable, because those who have hitherto failed to obtain the relief for which they crave from existing remedies are certain to gixe a trial to every new claimant to their confidence. The worst form of fad, however, is that which leads its victim voluntarily to restrict his diet, either in quarntity or by the elimination of many useful articles of food. Another is that in which the faddist pins his faith to some nostrum of unknown composition, and administers it to all and sundry with touching indifference to their special symptoms. It is especially on the borderland of medicine that the fad flourishes most freely. Osteopathy, Christian Science, are modern examples of the "fad gone mad," but hypnotism and electricity for long years defrayed the craving of the ignorant for a universal panacea. Human nature forbids the hope that the fad will ever be exterminated, but it is all-important that medical men should jealously guard their independence of mind and steer clear of unjustifiable faith in any particular measure or group of measures for the cure of disease. To yield to such a tendency is to degrade the practice of medicine and to abandon all the advantages associated with the progress of science.—*Medical Press.*

A Case of Albumosuria.

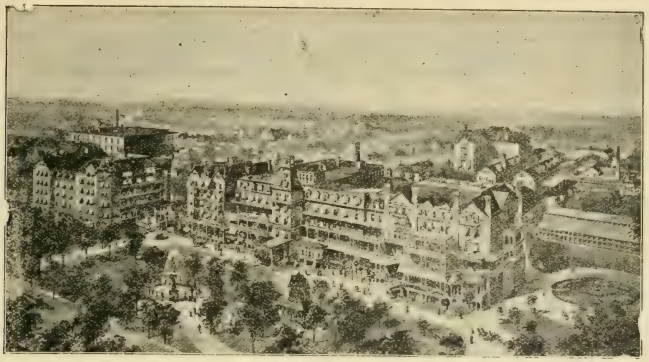
Kalischer (Deut. med. Woch., xxvii, p. 54, 1901) records another case of this disease associated with myelomata of the ribs, and similar to those already reported by other authors. The patient, a woman aged 67, first complained of pains over the lower part of throrax, which were aggravated by movement. The diagnosis in the early stages was quite obscure. After the symptoms had been present for a year the woman was seen by Kalischer. He discovered various points of maximum tenderness, especially marked at the junction of the fifth, sixth, seventh, and eighth left ribs, with their cartilages. Later various irregularities appeared in the rib outlines, prominences and depressions. with softness and bending at certain points. The sternum, clavicles, and scapulae also exhibited soft and tender areas. Pain was severe on the slightest movements of the arms, on taking a deep breath, or on the exertion of speaking loudly. Death occurred from general weakness a year and a half after the first onset of the disease. Albumose was found in the urine when first examined by Kalischer, and continued present constantly until death; occasionally albumen was also found. On heating the urine a copious precipitate appeared, which dissolved entirely on boiling and reappeared on cooling. Nitric acid in the cold gave a precipitate which dissolved with heat, and also reappeared on cooling. At the necropsy the ribs was found soft and friable, and easily cut with scissors. The bony substance had almost entirely disappeared, and its place was occupied by a brownish-red diffluent material. Microscopical examination of this material showed it to consist for the most part of white corpuscle, without any appearance of regular "tumor" growth. The condition was therefore one of lymphoid myeloma.—*British Medical Journal.*

Facial Neuralgia Following Nasal Catarrh

At a meeting of the French Society of Otology and Laryngology, M. Sarremone, of Paris, related the history of a patient who suffered from intermittent facial neuralgia of paroxysmal form with atrocious pain, especially along the left superior alveolus. These neuralgic crises were preceded by catarrhal involvement of the corresponding inferior turbinated. The teeth were healthy. The nasal lesion consisted of a small mucous polyp of the middle meatus, the removal of which afforded no relief, and an hypertrophic nasal catarrh. The mucous membrane was restored to its integrity, and the neuralgia vanished. The author inquired whether the troubles were ordinary reflexes through the intermediary of the trifacial or an actual neuritis.

The old time practice of using astringent injection in vaginal catarrhs has given way to more advanced methods. A true germicide possessing astringent and curative properties is acknowledged to be superior. Clinical and microscopical evidence is at hand to substantiate these properties of Antiseptic Sphenoids.

McCoy, Howe Company.



The Battle Creek Sanitarium

Is a place where chronic invalids, especially those suffering from the various form of indigestion, diseases peculiar to women, constipation, chronic malarial poisoning, anæmia, obesity, the uric acid diathesis-neurasthenia, migraine, and similar ailments are trained into health by the aid of systematic regimen, scientific hydrotherapy, massage, Swedish movements, Swedish gymnastics, and other rational means. Most cases of Bright's disease, diabetes, locomotor ataxia, and many other maladies which are incurable under ordinary conditions, are greatly improved by the combined use of rational remedies and systematic regime, and many are practically cured. Extensive bacteriological, chemical, and microscopical laboratories connected with the institution afford excellent facilities for accuracy in diagnosis and original research.

The Institution is conducted strictly within ethical lines.

For information concerning the facilities afforded, terms, etc., address

THE SANITARIUM, Battle Creek, Mich,

Salo-Sedatus.

This anti-fever and anti-pain remedy has been before the public for over ten years, during which time it has demonstrated its claims in many an epidemic of zymotic diseases. If we should give a reason for its efficiency in these diseases it would be that it addresses itself as a searching intestinal antiseptic. Intestinal, autoxemia, self-poisoning, is as much a fact as is the fecal matter that is made in the intestines, and must leave our bodies. That we are not always poisoned by that matter is owing to the vital resistance of the entire organism in its organs. Let this resistance be weakened at any point from any of the many possible material or psychic causes to which the human body is constantly exposed in active life, and the ever ready source of poison is ready for its complex of baneful operations. Help up this zymotic condition with Salo-Sedatus, and you help the organism to regain its former vital power of resistance.—*The Alkaloidal Clinic.*

Sanmetto in Urethral Stricture.

Dr. Jos. Swindell, of West Burlington, Iowa, writing, says: "I have been using Sanmetto for several years. I find nothing that suits me as well in genito-urinary diseases. I am using it right along in conjunction with treatment of urethral stricture. It soothes, checks, and prevents smarting and inflammation that is so common after passage of bougie. Its ease of administration and formula should recommend it to the profession."

In children, enlarged lymphatic glands about the neck are frequently due to enlarged tonsils or to the presence of adenoids. The throat must, therefore, always be examined in these cases, for removal of the tonsils or adenoids will cause the glands to subside. In adults, enlarged glands are very suggestive of the presence of malignant trouble, and necessitate careful examination of the whole mouth and throat.—*Experience.*

Treatment of Gonorrhea With Nitric Acid.

An editorial in the Journal of the American Medical Association says that "Popper was led to make urethral injections, of a solution of nitric acid in order to avoid the generation of heat caused by the chemical decomposition of silver nitrate. Cocaine or eucaine may be added to solution for anæsthetic purpose. In cases of acute gonorrhœal urethritis a 10 or 15 per cent. solution of pure concentrated nitric acid was injected from three to five times daily, the fluid being permitted to remain in the urethra for one to two minutes. In the course of from twenty-four to fort-eight hours the character of the copious discharge will have changed. The urine becomes elear, and contains only fibres. The secretion is viscid and conciderably diminished. In the course of five or six days at times only a small drop can be expressed; later only in the morning. In the course of a week in most instances the discharge is even still less. The gonococci also rapidly diminish in number in the course of a day. and disappear wholly in from five to eight days. For three or four days after the gonococci have no longer been demonstrable the injections are made but twice a day, and then but once a day. After from twelve to fourteen days astringents are prescribed for the purpose of causing the disappearence of any filaments that may yet be present. If the discharge is not increased following a seminal emission, or gonococci do not appear, the injections are gradually discontinued; so that the treatment shall be concluded in from fifteen to thirty days. In chronic cases or in the presence of posterior urethritis, a twenty-five per cent. solution of nitric acid is injected once daily by means of Guyon's syringe."

Hysterical Tetany in Childbed.

Christeanu (Rev. de Chir., An. v) reports the case of a woman, aged 20 years, in labor at term, who had extreme anasarca without albuminuria. Pains at first good, then failing. Os found dilated after twenty-four hours, and there being no progress three hours later, she was delivered under chloroform with forceps, in the interest of the child. There was great hemorrhage. Convalesence was normal, temperature normal, and she was anxious to nurse the child herself, though very anæmic. On the twentieth day her husband decided to get a wet nurse. Two days later she had a sudden attack of severe pain in the left temporomaxillary joint, without rise of temperature. The pain persisted in spite of antipyrin, salicylates, and massage, and spread to the left half of the neck, simulating a rheumatic torticollis. She then had frequent attacks—twelve to twenty in twenty-four hours—of sudden violent contractions of the left masseter, so that she bit her tongue severely, and once she had retraction of the head of pisthotonos. There was impairment of swallowing and an attack of suffocation. In spite of bromides and enemata with chloral and opium, the condition spread till the whole left side was affected. The attacks lasted about twenty minutes, were painful, came on at any time, but specially under the influence of gay or sad emotions. She had a zone of complete anæsthenia and hypersæsthetic spots without any visible alteration. Under the administration of valerianate of ammonium and warm baths she improved, and in forty-five days was completely recovered. Her previous history furnished no explanation. She had never shown hysteria, and the family history was good.—British Medical Record.

Sanmetto in Spasms of Bladder Neck.

Sanmetto is not new to me as I have used it two years. I will report a case that came under my treatment on the fourth day of February. A lady about forty years of age had spasms of the neck of the bladder. She was in constant pain. She could neither sleep nor set still. She was compelled to urinate as often as every half hour. I commenced giving her Sanmetto, a teaspoonful every two hours for the first twelve hours. The next twenty-four hours I gave her a teaspoonful every three hours, and the next twenty-four hours, every four hours, unless sleeping. Discharged the woman the fifth day as well, and she has been well ever since. A prominent physician of our city had been treating this patient, but she received no benefit from his treatment what ever.

Wm. S. McLean, M. D.
Saginaw, E. S., Mich.

University College of Medicine.

In endeavoring to raise the standard of medical education, this Institution has always maintained an optional four year course. even before the establishment two years ago of the compulsory four year system.

The first regular four year class which will graduate the coming session will necessarily be small, and will offer unusual opportunities to the student for personal clinical work.

Dr. Rina Monti, a young Italian lady' has been appointed lecturer in anatomy at the University of Pavia.

GLYCO-HEROIN.

(SMITH)

Coughs, Bronchitis, Phthisis, Asthma, Laryngitis, Pneumonia and Whooping Cough.

Glyco-Heroin (Smith) has passed the scrutiny of both clinical and scientific investigation and its therapeutic value has been well defined and established by prominent men in the profession of medicine.

Each teaspoonful represents one-sixteenth grain Heroin with

A true exact solution of Heroin in Glycerine.

Ammonium Hypophosphite
Hyoscyamus
White Pine Bark
Balsam Tolu
Glycerine and Aromatics.

Permanent and unalterable through age.

to enhance the palliative effect of Heroin and to embody decided curative properties in this preparation.

Glyco-Heroin (Smith) places at the command of the physician and for his convenience a most superb and finished remedy to be accepted and used by him as an ethical preparation with physical characteristics and therapeutic properties far excelling all other remedies of the Materia Medica and Pharmacopœa for the treatment of Coughs in all the various forms

Adult dose—one teaspoonful.

The quantity ordinarily ordered by the physician is two, three or four ounces.

Physicians are requested to write for samples.

SUPPLIED BY ALL RETAIL DRUGGISTS THROUGHOUT THE UNITED STATES.

MARTIN H. SMITH CO.
68 MURRAY ST., NEW YORK, U. S. A.

Mosquitos and Malaria.

The New York City Board of Health, according to the Record, has prepared a circular of instruction regarding the relation of mosquitos to the spread of malaria, and the best means of exterminating these pests. It advises the drainage and filling of all pools of stagnant water, and the treatment by oil of those which cannot be drained. It is to be hoped that the board will follow its own advice and do away with the breeding-places of mosquitos, which are very plentiful in some of the outlying parts of the city and especially in the Central and other public parks in the several boroughs. Mosquitos have been unusually numerous in Fordham Heights during the past month and simultaneously with their appearance there have been many cases of malaria. The region is on elevated ground and has none of the traditional aspects of a malarious district. Dr. Alvah H. Doty, the Health Officer of the Port, has inaugurated a campaign against mosquitos on Staten Island in the vicinity of the quarantine station, the object being to determine the possibility of exterminating the insects in a given region, and the effect such extermination would have on the prevalence of malaria. A preliminary survey of the region had brought to light many cases of malaria and had shown the presence of the anopheles among the mosquitos and of their larvæ in stagnant pools. The pools, cesspools, and other natural and artificial collections of stagnant water will be subjected to the oil treatment, and the results as regards the health and comfort of those living in the neighborhood will be carfully noted. A report of a successful experiment comes from Camp Jackson, New Orleans, where formerly mosquitos were in such overwhelming numbers that life for the small garrison maintained there was almost intolerable. A free use of crude petroleum has been made with the result that, from being one of the worst places in New Orleans, it is now the freest from mosquitos of any part of the city.

The care of Hypodermic needles.

Doin notes that it is not necessary to throw away hypodermic needles that have been used, for if the canal has become obstructed, the needle can be made as good as new by simply boiling it for ten minutes in a solution of carbonate of soda; the precipitate which has collected on it is dissolved by this method and the primitive briliancy is restored.—*Bulltin General de Therapeuiique.* June 8, 1901.

It is reported that forty thousand people die every year in Germany from cancer.

The Reault of Four Years' Inoculation Against the Plague.

In a recent number of the Indian Medical Gazette Major Bannerman, I. M. S., gives the results of four years' experience of preventive inoculations in restricting the spread of plague. Up to the end of last year no less than 1,628,696 doses of anti-plague vaccine had been issued from the Plague ResearchL aboratory at Bombay, and in all cases in which accurate returns were obtainable, Major Bannerman is enable to state "without exception there has been a striking reduction in plague mortality, and a markedly favourable effect on the case incidence has been produced." The returns which he gives from the various plague centres appear to justify this encouraging statement, and they are well worthy of attention by those who are interested in forming a trustworthy opinion on the value of Professor Haffkin's method. We agree with our contemporary in the view that no one who studies this report can do other than believe in the efficacy of inoculation as a protective measure against plague. Major Bannermann concludes his report with the assurance, based on experience, that, to begin with, inoculation is harmless, that when given in the incubation stage it appears in most cases to abort the disease; further, that inoculation confers a high degree of immunity against an attack, and thus reduce the number of cases, and that when an inoculated person is attacked his chances of recovery are greatly enhanced.

Can Anæsthesia be Induced During Sleep.

In the course of a recent trial it was stated by an expert medical witness that it was not possible to produce anæsthesia in the case of a sleeping individual, and it does not appear that this statement was challenged in cross-examination. It might easily have been pointed out to the Court that no less an authority than Dolbeau found that only three persons awakened out of a series of nine to whom he administered chloroform while sleeping. Dr. Leonard Guthrie is said to have frequently attempted to have chloroformed children in their sleep, but without success; but on the other hand, Dr. Dudley Buxton has no doubt that chloroform may in some cases be so administered, though he is less sure about ether. These views have an important medico-legal bearing, because anæsthetics are sometimes administered with a criminal purpose. It is difficult to understand how ether can be used for successfllly placing a sleeping person under anæsthesia, but it is asserted by Dr. Turnbull that either chloroform or ether may be administered during sleep without awakening the subject of experiment. Dr. P. G. Paugh has reported three cases, all boys between the ages of four and nine, in which he succeeded in accomplishing such anæsthesia. Chloroform was used in each case, and no great difficulty seems to have been encountered, the probability being that the patients in these cases were exceptionally heavy sleepers, in which case it is quite conceivable that an expert anæsthetist would not experience any insurmountable difficulty.—*The Medical Press.*

Criminal Advertisements.

The following is an editoral, taken from the Journal of the American Medical Association. It is to the point.

A daily newspaper which is often sensible in its editorial comments on medical subjects, replies to the criticisms on certain of its advertisements made by a physician, that it assumes no responsibility for the reliability of their representations. If they interfer with the practice of physicians, as it assumes is the case the latter can not be considered impartial censors. It therefore rejects the suggestion of scrunity and revision of its advertising columns as made by its correspondent as inadmissible. A rapid inspection of the advertisements in the same issue reveals, among other scattering more or less objectionable drug "ads.," a special corner headed "Medical" containing four advertisements. One of these is an alleged gonorrhea cure, and ends with the significant sentence, "Rubber goods carried." The three others are all of the "ladies' safe remedy" class and if they do not openly profess an evil purpose are open to hardly any other construction. If the remedies are harmless and will not accomplish the results covertly claimed for them, they are frauds and humbugs of the most villainous kind. On the other hand, if they are efficacious in the manner intended, then their sale and use is criminal and the newspaper that admits such advertisements is a participant in the crime. The editor can take which ever horn of the dilemma he chooses; in advertising such remedies he is either selling his space to humbug people or is allowing the space to be used for criminal purposes. He can not plead ignorance. When certain pills are advertised as "monthly regulator; safe and sure; never fails;" and when the advertiser says, "send for woman's safeguard," there is no doubt as to what is meant The editoral apology is pitifully weak, not to call it anything worse. "Money talks" altogether too much with the advertising department of the daily press, and morality and even common decency must take a second place.

STANDARD PREPARATIONS

Made for and Highly Endorsed by Medical Men Everywhere.

Unguentum Resinol. *Antipruritic, Antiphlogistic, Nutrient and Plerotic*

Elixir Cascanata. *Alterative, Laxative, Antacid and Secernent.*

Resinol Soap. *Prophylactic, Germacidal, Etc.*

"Resinolis the best remedy I have ever used in Pruritus Ani.
GEO. H. SMITH, M. D.. Brooklyn, N. Y."

I have requested our druggists to carry UNGUENTUM RESINOL and RESINOL SOAP. They are all right.—A. E. EARLY, M. D., Kingman, Arizona.

RESINOL has given me entire satisfaction. Its wide range of usefulness especially recommends it.—LOUIS A. BOORING, M. D., Louisville, Ky.

Am prescribing UNGUENTUM RESINOL with great satisfaction.—J. S. BEAUDRY, M. D., Chicago, Ill.

Have used RESINOL in many cases and am exceedingly pleased with its action.—G. E. WILDER, M. D. Sandusky, Ohio.

I cannot find anything that can take the place of RESINOL.—A. AGEE, M. D., Holbrook Ky.

I have found RESINOL to be a remarkable cure for almost any type of Sore.—G. D. BOUDOUSQUIE, M.D. Tuscaloosa, Ala.

I have prescribed RESINOL in many cases and am very much pleased with it.—SAM'L G. SEWALL, M. D. 1. E121st St., New York.

I have prescribed UNGUENTUM RESINOL with great success in Eczema, Pruritis Ani and Pruritis Vulvæ.—WM. LAMBERT, M. D., Kansas City. Mo.

I am more than pleased with UNGUENTUM RESINOL.—C. B. WALRAD, M. D., Johnstown N. Y.

All Leading Druggists carry these Goods.

RESINOL CHEMICAL COMPANY,

Samples sent on request. BALTIMORE, MD.

BAYER

TANNIGEN — INTESTINAL ASTRINGENT

LACTO-SOMATOSE — THE FOOD IN GASTRO-INTESTINAL AFFECTIONS

TANNOPINE — The INTESTINAL ASTRINGENT and DISINFECTANT

FERRO-SOMATOSE — The FERRUGINOUS NUTRIENT

PROTARGOL — The ANTIGONORRHOICUM AND SUBSTITUTE FOR SILVER NITRATE

HEDONAL — The PROMOTER OF NATURAL SLEEP

SOMATOSE — NUTRIENT TONIC, RESTORATIVE

HEMICRANIN — The SPECIFIC FOR HEADACHE

EUROPHEN — The ODORLESS AND NONTOXIC IODOFORM SUBSTITUTE

EPICARIN — The NONPOISONOUS DERMAL PARASITICIDE

ASPIRN — The AGREEABLE AND EFFICIENT SUBSTITUTE FOR THE SALICYLATES

FOR SAMPLES AND LITERATURE OF ABOVE PRODUCTS apply to

PHARMACEUTICAL PRODUCTS

FARBENFABRIKEN OF ELBERFELD CO. 40 STONE ST. New York P.O. BOX 2880.

The Anti-tubercular Serum of Raw Meat.

The raw meat treatment of phthsis recommended by Grancher, Debove, Darenbert, etc., has failed to become very generally adopted, owing to the practical difficulties in the way of its application.

The work of MM Richet and Hericourt on the specification of raw meat is not due to mere accident, but to a careful sifting out of observations carried on during a period of five years.

In a communication to the Academie des Sciences (20th February 1900), these authorities proved that cooked meat does not possesss the specific properties of raw meat or prevent the development of the disease—a supposition hitherto unsupported by scientific evidence, The most original part however of their investigations, is that the therapeutic activity of raw meat is solely concentrated in the portion soluble in water, which part is contained in the muscular plasma, and their raw meat does not act as a super-alimentary agent, but somewhat as a lymph vaccine, having a distinct and specific action against tuberculosis.

Their long and laborious investigations therefore, throw an entirely new light on the raw meat treatment.

Dogs rendered tuberculous by injection into the saphena vein of the tibia, of from half to one cubic centimeter per kilo of the animal's weight of cultures of human tuberculosis, invariably perished unless submitted to to the raw meat treatment within from 50 to 60 days. On the other hand, if, after inoculation, these animals are exclusively fed on raw meat, they live much longer (from 10 or 12 months, often more), and some appear to be quite cured. The beneficial action of the raw meat is shown, even if the animal is fed on it long after the infection has commenced and even when the state of cachexy is extreme, the appetite returns while strength and weight increase rapidly. Dogs which are fed on raw meat before inoculation, have great resisting power and are only inoculated after repeated and persistent attemps to infect them.

The authors of this discovery therefore have applied to this form of opotheraphy has term Zomotheraphy (from the meat juice.

The muscular plasma called Zomol, is filtered rapidly as soon as expressed from the meat, evaporated at a low temperature until converted into small dry scale.

By some authors the fluid portion obtained by pressure from "living" tissues, is known as muscle plasma and as muscle serum when expressed from "dead" muscular tissue, and a product discovered by Khuhne, (said to form the greater part of the albuminous substance of "dead" muscle) is variously called Myosin, Paramyosniogen and Muskulin, Other authorities (Chittenden, Cumins. Halliburton, Nasse, Siegfried) have isolatad various principles from the soluble constituents of raw meat.

Dissolved in water, Zomol partakes of all the proprieties of fresh muscular plasma and replaces it in all cases with advantage. It can also be administered in the dry, liquid or semi-liquid state with food and is quite palatable.

Zomol is especially indicated for rectal ailmentation, and can be given in this way where patients object to it otherwise or where buccal ailmentation is dangerous, as in typhoid fever, ulceration of the stomach, etc.

The daily doses should be at least 10 grammes (one third of an ounce) about two or three teaspoonfuls, *which is equivalent to the soluble constituents of 200 grammes of fresh meat.*

A most important memoir was presented by Dr. Hericourt to the Academy of Medicine in June 1901, dealing very specifically with thirty-five cases of consumption, and says the whole thirty-five have been cured by the Zomol or serum of raw meat treatment.

The cases are given with considerable detail, and Hericourt's standing is so high, that his claims are accepted without question.

Now that the anti-tubercular properties of raw meat have been so thoroughly demonstrated and that we have a convenient mode of administering it in the form of Zomol, some progress should be possible in the curative treatment of phthisis.

Treatment of Tuberculosis.

For ten days each morning an injection of five to ten centigrams of cacodylate of soda is given, followed by rest five days without medication. Then, for ten days, morning and evening, fifteen to twenty centigrams of creosote in capsules, followed by five days rest when the treatment with cacodylate of soda is repeated, and so on. The alternate administration of these remedies is said to give better results than either of them alone, and has been used with success in one of the largest hospitals of Paris. —*Medical Review.*

Beer vs. Water.

It is said that Dr. Tanner, of fasting fame, now sixty-eigh years old, has challenged the brewers of Denver to a fasting contest. Six men are to drink beer only and he to drink water. The brewers have agreed to the contest.

HYDROZONE

(30 vol. preserved H_2O_2 solution.)

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Treatment of Summer Diarrhœa of Children.

In a discussion on this subject at the annual meeting of the American Pediatic Society (Philad. Med. Journ., June 8th, 1901) Charles G. Kerley, of New York, read a paper based on the study of 551 cases. Only 6 per cent. of his cases were nursed, and 472 were fed on cow's milk in whole or in part. He considered the expense of proprietary infant foods a fortunate circumstance. When first seen his cases had lasted from one to ten days or more; 80 cases recovered in three days, 168 in four to seven days, the rest in longer periods; 499 patients were treated to the conclusion of the sickness, 10 resulting fatally. One invariable rule was to stop the milk, on the ground that it favored the growth of the various bacteria involved. In 218 necropsies in which gross lesions were suspected slight lesions were found, and, on the other hand, extensive ulcerations had been found in cases from which little mucus and no blood had been passed. In patients dying within a few hours a pale, washedout gut, with enlarged lymph follicles, was found, but no ulcers. Milk is recommended only when the stools become apparently normal. For the most part, barley or other cereal water, combined with meat broths or beef juice, should be given; brandy should not be given. By "dextrinising" the barley—at a temperature not higher than 100 degs. F. to prevent the development of a nasty malty taste—its nutritive values may be doubled, but it is impossible to give for any length of time a stronger barley water than that containing two tablespoonfuls to the pint. The drugs used were limited to four—calomel, castor oil, bismuth subnitrate, and opium. Irrigation of the colon has been much overdone; it should never be practiced oftener than once in eight hours, and not at all without a possitive indication. Henry Keplik advocated albumin water for the acute period, and regarded irrigation with salt solution as positively nutrient on account of the absorption of the salt. The stimulant action of meat should also be considered. Emmet Holt would add magnesium sulphate to the list of useful drugs, giving 10 grs. to 15 grs. every hour or two until the stools looked like clear water.—British Medical Journal.

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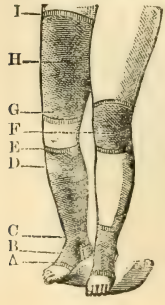

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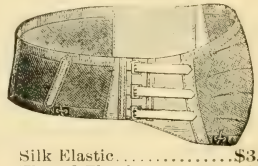

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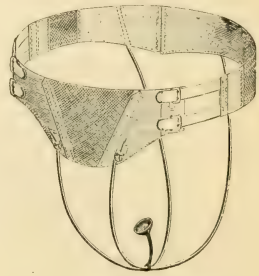

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Another Fad--Air and Sun Cure.

According to a newspader report there exists on Long Island an institution for physical culture, where the "air and sun cure" is carried on in such a way as to arouse considerable opposition on the part of permanent residents. The treatment seems to include the use of pretty nearly a minimum of clothing and this in both sexes, and on the public roads, at the local post-office and the railroad station. The sights at the depot became the gossip of the road and attracted curious visitors, while they scandalized the residents. It was when the "sun curists" finally attempted to invade the village church in their abbreviated costume that the storm broke and the citizens met in conclave and protested, sending word to the proprietor of the resort that while they had no objections to the methods, if carried on in due privacy, they distinctly objected to the cure being taken in the scanty clothing on the highways and in the public places. Unless this was discontinued, the paper asserts, it was intimated that the patients would soon have other ailments to nurse. For a time the protest had some effect, but with the advent of hot weather matters are reported as bad as ever, and recourse is threatened to legal proceedings. Allowing for sensational newspaper embellishments, the account, if it has any basis at all, would indicate peculiar methods and management in the "physical culture health home."—*Journal American Medical Association.*

Foreign Students in Germany.

No better testimony could be forthcoming of the high esteem in which German methods of teaching are held by the world at large than the very large number of foreigners who avail themselves of the facilities provided by the various universities. Apart from the Russian students, who, for political reasons, prefer German schools to their own, close upon two thousand other students of all nationalities rub shoulders with the native students. In view of the fact that the foreign students pay for their education on the same footing as the native contingent, one would have thought that both professors and the general body of students would have been flattered and pleased at this evidence of popularity. Apparently this is not the case, for a movement of protest against the large admixture of foreign students has been inaugurated, on the ground that the native students are crowded out. This is a very good reason for requesting the authorities to provide additional accommodation, but certainly not for proposing the exclusion of foreigners. We should be sorry to see German universities follow the example of the French in placing obstacles in the way of foreigners desirous of availing themselves of their educational institutions. In years gone by it was the boast of the French school that it was the favorite resort of the studious youths from all parts of the world, a proud position which a narrow-minded protectionism has ruined, although to its popularity with foreigners the intellectual pre-eminence which France formerly occupied in Europe, and indeed in the world, was largely due. Let our German scholars remember that science knows no frontier, and that it is a privilege to be jealously safeguarded to be able to attract and retain the affection of the studiously inclined.—*Medical Press and Circular.*

Pregnancy and Politics.

The present situation in Servia due to the mistaken diagnosis of a French specialist, will serve to impress more vividly upon the minds of the profession, if indeed that is necessary, that the early diagnosis of pregnancy is not always easy, and that a consultant should be cautious in reversing the diagnosis of the physician in charge of the case, especially when the political consequences of his diagnosis may be as great as in the present case, Two months after the marriage, as a result of the examination made by Dr. Coulet, a French specialist, the announcement was made to the Servian nation that the Queen was four or five months pregnant. During the past month the cannon were in readiness to salute the new heir of the throne, the decorations for the houses were all prepared, awaiting the salute, and, above all, censorious minds of a not too satisfied people had been somewhat quieted, when suddenly comes the new diagnosis of parametritis. Of course, mention is made of the fact that Dr. Coulet received a fee of $200 a day for a stay of nearly a month.—*American Medicine.*

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Fire at the College of Physicians and Surgeons.

A bolt of lightning, striking the dome of the building of the College of Physicians and Surgeons, June 25th, set fire to the top floor, where the anatomical and physiological laboratories were situated. The damage done to the college building is estimated at $30,000. The college is insured for 100,000. The physiological laboratory outfit, consisting of apparatus that cost over 15,000, was all destroyed. The damage to contents would have been far more serious, but for the fact that many valuable pieces of apparatus had been taken the day before to the West Division High School, which building has been recently purchased by the College.—*Medical News.*

Advantages of Circumcision.

Jonathan Hutchinson regards circumcision as the best measure ever proposed for the prevention of syphilis. It is also by conifying to a certain extent the glans penis, increase the power of sexual control, the great argument for the operation in Asiatic countries. Syphilis is said to be less common among Jews than Christians. It certainly lessens the liability to herpes and seborrhea in middle life and the danger of cancer in the oid. Circumcision should be performed in early childhood. In any case the prepuce should be stripped free from the glans penis, to which in most infants it is congenitally adherent. This is best done the first week or month, but should receive attention by the second year.—*Indiana Medical Journal.*

Physician, Not Horse Doctor.

A physician and surgeon has not the right to practice as a veterinarian. Such is the decision given by Judge W. G. Cochran in a case in the Douglas County Circuit Court, in which Dr. Barbour has sued Mell Crews for medical attention given to Crews' racer, A. J. Click, which was injured while racing at Dubuque, Iowa. Barbour presented a bill for $258 and Crews contended that this amount was excessive, but paid $100. Barbour sued for the remaining $158, but lost the suit, as the Judge decided he had no right to practice as a horse doctor. —*Medical News.*

Patellar Suture.

Barker (Archiv f. kin. Chir., B. 63, H. 4) states that in twenty-one cases he has sutured the framents of the broken patella together in the following manner under both local and general anesthesia. The lower fragment is held by the thumb and forefinger and joint opened by passing in a knife horizontally with the cutting edge upward toward the long axis of the patellar until that bone is encountered. Through this little hole the fluid and blood within the joint are pressed out. This emptying of the joint is important as decreasing the dangers of sepsis. A specially designed needle is then passed into this opening, behind both fragments and through the tendon to just beneath the skin above the upper piece. Its point is then cut down upon and a wire thread passed through its eye. It is then drawn out of the lower hole leaving the wire free in each incision. The needle is then passed in front of the fragments and receiving the upper end of the wire at the upper hole is withdrawn. The two fragments are now freed of clot and tissue by vigorous rubbing in the hands of an assistant and when opposed are fixed by twisting the wire up. It is then cut off and the stump hidden against the lower fragment. No joint reaction has occurred from its presence.—*Medical News.*

Hydrocele.

Ohl (Deutsch. Zeitschr f. Chir., B. 59, 45 and 6, 1901), reports the immediate and remote results in nineteen cases of simple hydrocele operated on by the method suggested by Winkelmann in 1898. Briefly, this consists in opening the sac, evacuating the contents and then wrapping the tunica carefully about the testis and replacing it within the scrotum. The skin is then closed by some of the well-known procedures. Among the series reported many were followed up by the operator himself and the others by the family physicians. In all it was found that the testicle was mobile, insensitive and in every way normal. The scar-tissue about it was of very moderate extent and did not interfere with any of its features. In many of the cases it took a most careful examination to show how the normal and operated sides differed. The ease and rapidity with which the operation may be done and these very flattering results seem to make the operation the one of choice.—Medical News.

Chronic rheumatism is greatly benefited by hypodermic injections of colchicin near the affected parts.

Bacteria in the Uterus after Labor.

In contradiction to the statements of other observers, Wormser holds that although the presence of bacteria in the uterine cavity during the first week after labor is abnormal, this is not true at a later period. He bases this opinion upon the fact that he discovered germs in the uterus between the eleventh and eighteenth days in 84 of 100 cases who had had no temperature during the puerperium.

The investigations of G. Vogel show that bacteria are found in the uterus in the greater number of cases of fever during the puerperium. In such cases with bacteria present there is usually some abnorality of the genitals. There is usually a retention of lochia, which may result from latero-version of the uterus or other causes. The discharge should be hastened by stimulating to cause uterine contraction, and irrigation of the utering cavity followed by injection of 20 per cent. alcoholic solution of carbolic acid should not be too long delayed. Cervical lacerations favor the ascent of bacteria into the uterus. Small wounds of the genitals aid the development of germs and greatly increase the danger. For this reason thorough previous cleansing is indicated. In the normal puerperium the uterine cavity is usually sterile at first, though bacteria, even the streptococcus, may be present without causing symptoms. Later the secretion of the normal puerperal woman frequently contains bacteria, though no fever is usually caused by them. Streptococci are comparatively seldom found in the puerperium when there is no fever.—American Journal of Obstetrics.

The Pathology of Alopecia.

Buschke (Berl. klin. Woch., No. 53, 1900), following up the observation of Giovanni that patients to whom he was administering acetate of thallium became affected with alopecia, has studied the effect of small doses of this drug on mice given in their food. The result of its administration was that the hair came out on different parts of the body. This effect was not due to any appreciable local action of the drug on the skin, but in Buschke's opinion to certain disturbances affecting the peripheral nervous system of a trophic nature.

Nearly half a million persons sought relief from the heat last week by resorting to to the public baths. They were patronized by 117,452 men, 1,474 women, 331,235 boys and 6,567 girls.

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Surgical Hints.

In cases of delirium tremens, when the action of sedative drugs is apparently insufficient to obtain rest and sleep, a blister or a mustard plaster applied to the back of the neck often has an excellent effect.

Little children should never be operated on during very hot weather if the surgeon can choose his own time. They are very apt at this time, however carefully they are fed, to develop a severe form of intractable diarrhœa.

Atheroma of arteries does not contra-indicate amputations so much on account of the danger of hæmorrhage as because, in these cases, the flaps slough easily owing to lowered vitality. Hence it is necessary to select the operation that will give the best blood supply (i.e., the operation of taking in a supply of bullock's blood.]

It is better to discard carbolic acid entirely in the treatment of wounds of children. Not only do they develop gangrene very readily from its continuous effect in wet dressings, but fatal cases of poisoning have been known to occur from the application of so weak a solution as 1-40.

In any operations in which the muscles and fasciæ are divided, it is well to remember that these structures are apt to become further separated on account of the handling of the parts during the operation. Hence it is well, when suturing these structures, to pull the skin at the angles of the incision in order to make sure that no divided tissues extend beyond the limits of the original incision.—*Int'l Journal of Surgery.*

Free Hospital for Poor Consumptives.

A tract of 215 acres has been purchased in the Blue Mountains near White Haven, Pa., as a site for the proposed sanitorium for poor tuberculous individuals. It varies from 1,500 to 1,800 feet above sea level and is said to be an ideal location. The bill appropriating $110,000 for the erection of the necessary buildings is now before Governor Stone. By the terms of the bill $100,000 will be used for the construction of the hospital buildings, which will be arranged on the cottage plan, and the remaining $10,000 will be used in the treatment of the tuberculous poor in Philadelphia. Each year the State gives about $1,000,000 for the maintenance of free hospitals, but until this year nothing has been done in behalf of the tuberculous poor. It is estimated that 6,000 deaths occur annually in Pennsylvania from this disease and that one-third of the sick poor are tuberculous—*Medical News.*

Boils.

Of undoubted value are remedies which improve the general condition, such as iron, arsenic, cod-liver oil, hypophosphites, and syrup of calcium lactophosphate. The urine should be examined as diabetes or Bright's disease may be the cause of the furuncle formation. In long-standing cases local irritations should be sought for, even old smoking jackets, sweaters, etc., being sources of infection. A boil may often be aborted by the application of iodine, boric acid, ichthyol, etc. Heitmann's plaster for this purpose is:

℞	Ac. salicylici	gm. 8.0 (ij ʒ)
	Emplast. saponis	30.0 (ʒ ij)
	Emplast. diachyli	15.0 (ʒ i)

Spread on cloth.

Another useful formula is:

℞	Tinct. iodi	gm. 4.0 (ʒ i)
	Ac. tannici	2.0 (ʒ ss)
	Pulv. acaciæ	2.0 (ʒ ss)

Or a few drops of carbolic acid may be injected into the boil. The following ointment may be applied if pus has already formed. It serves all the purposes of a plaster, allays pain, and does not favor reinfection. It is

℞	Iodoformi	gm. 4.0 (ʒ i)
	Ung. vaselin. plumb.	30.0 (ʒ i)

Spread on lint.

Where boils are multiple, the intervening and surrounding skin should be smeared with equal parts of zinc oxide and vaseline with four per cent. of boric acid. After the boil has burst the cavity must be treated on ordinary surgical principles.—"Reference Handbook of the Medical Sciences."

Plague Ravages in Egypt.

The United States consular representative at Cairo has informed the State Department that the bubonic plague which prevails in many of the towns of Egypt, is of a virulent and destructive type, and on account of its rapid development and the exceptionally high rate of mortality, general apprehension and alarm now prevail throughout the country. During the week preceding June 19th, there were twenty-three cases reported, twenty-one of which were at Seagazig and two at Minieh. Sixteen cases were admitted to the hospital, and five were found dead outside of the hospital at the former place. Of those admitted to the hospital six died.—*Medical News.*

Dr. Nicholas Senn has been reappointed surgeon general of the Illinois militia.

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Bi-Century Twins.

Two children of the same mother were born in a village in Warren county, New York, one a few minutes before midnight, December 31st, 1900, the other a few minutes past 12 o'clock on the morning of January 1st, 1901. Under ordinary circumstances their twinship would be incontestable, but the question becomes more serious when it is considered that they were not only born on different days, months and years, but one in the nineteenth century and the other in the twentieth.—*Exc.*

Protection of the Perineum.

A rather irrational new method intended to protect the perineum is described by J. Hofbauer. As the head emerges the right hand presses against it through the left perineum, while the left seizes and rotates the head about 40 deg. in the direction in which restitution would occur after emerging from the vulva. The proposer's idea is that by causing the head to pass through the vulva with the long diameter of the head in the oblique diameter of the genital canal, the tension upon the perineum will be relieved.—American Journal of Obstetrics.

As Careless as Bold.

The story of a remarkable surgical operation is told in a Danish medical periodical, in the treatment of a patient who had become asphyxiated from the administration of chloroform. The patient struggled, and when the process of anæsthesia was carried further he stopped breathing. Several expedients were resorted to in order to restore respiration, but in vain. There was no longer any pulse. In this emergency Dr. Maag opened the chest, detached portions of the third and fourth ribs two and a half inches long, and turning them back with a flap of flesh. Through the opening thus made, he thrust his hand. The heart was firmly grasped and compressed rhythmically. After a few squeezes that organ began to beat naturally. It was necessary to employ compression again at times, and also to inflate the lungs artificially. By these means the patient was kept alive for eleven hours and a half, and Dr Maag is inclined to believe that the man would have recovered were it not that the pleura was accidentally punctured.—*Sanitary Era.*

Try atropine in dysmenorrhea (large doses); it controls pain.

American Association of Orificial Surgeons.

The American Association of Orificial Surgeons will hold its next annual meeting in Chicago, September 18th and 19th, 1901. Although quite separate, Prof. Pratt's "Clinic" will be held the same week, beginning September 16th. To those familiar with orificial methods and their practical application to the cure of chronic diseases, no special appeal need be made, other than to urge their presence or attendance at this meeting, as it promises to be one of the best held since the organization of the Association. Lectures and papers have been promised by some of the most prominent medical men of the country. The discussions will be lively and interesting and one's knowledge of the work will be brightened and widened. To those who are not familiar with orificial ideas, theories and practices, we can say that there can be no more auspicious time to gain a practical knowledge of orificial surgery than at this meeting of the Association. The whole field will be brought within reach.

Due attention will be given to preparatory work, and fundamental principles thoroughly expounded and illustrated by some of the brightest surgeons of this country. Due attention will be given to after-treatment, therapeutical and otherwise. Papers and discussions will embrace the whole idea and give the sum and substance of more than fifteen years work along lines that have yielded prodigious success to the surgeon and general practitioner. No live man can now afford to ignore orificial surgery or be absent from this meeting.

W. E. Bloyer, M.D., Pres.,
Cincinnati, Ohio.
Henry C. Aldrich, M.D., Sec'y,
Minneapolis, Minnesota.

Ringworm.

In speaking of the treatment of tinea tonsurans or ringworm, A. Ravogli (N.Y. Med. Jour., June 29, 1901) says that any substance capable of producing the casting-off of the epidermis will be sufficient. On the extremities, a solution of bichloride or iodine or a mixture of chrysarobin and resorcin will be sufficient, but when a hairy surface is affected, the follicles become invaded and epilation is usually necessary. If on the scalp a mixture of crude coal oil and olive oil may be rubbed daily on the scalp by means of a strong paint brush. Pustulation may result, but this is beneficial. Another more elegant method is to use a one-per-cent. solution of bichloride to moisten the sponge attached to the positive pole of a battery and apply this to the diseased area for about one-half hour each day. He believes that children should not be kept from school, but arrangements should be made so that they could be properly isolated and treated at school by the teacher under the direction of the physician. Barber-shops are a very common source of infection and will continue to be so till sterilization of utensils after use is made compulsory by law.—*Med. Review.*

Memorial to a Country Doctor.

There was a physician in Dorchester County, who died in the 80th year of his age. He had served his community 50 years. When he died over 200 persons contributed to a monument fund, and the chief inscription reads thus:

"Erected to Dr. Thomas King Carroll by the people who hold in loving remembrance his fidelity to duty, his untiring devotion to his patients, and his heroic self-sacrifice in a time of pestilence. A physician who faithfully served his community for fifty years."

What a noble tribute. Would that the physician's hardships and his fidelity to duty were more highly appreciated in this selfish world, and expressions of gratitude and sympathy more freely given when living, as well as proper tributes when dead.

The Value of Throat Cultures in Diphtheria.

Dr. M. H. Fussell, of Philadephia, presented this paper. He said that the folowing statement could be proven: "(1) True cases of diphtheria may have few or more clinical symptoms; (2) cases of tonsilitis or pharyngitis may have severe symptoms and be serious, but no true diphtheria being present, and no Klebs-Lœfflor bacilli, there can be no transmission of diphtheria; (3) a diphtheritic exudate may be easily detached and leave no bleeding surface; (4) an exudate due to some other organism may be a true membrane impossible to detach from the mucous membrane. He said that cultures can most surely and with less risk of mistake be made in the laboratories, but that they could be made at home and should be made there if we intend to keep pace with the rapid strides of recent medicine.—Boston Medical and Surgical Journal.

A dose of castor oil, although not sufficiently large to produce a movement of the bowels, will frequently allay the colicky pains in infants.

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Pulmonary Tuberculosis and the Trades.

By C. P. Ambler, M.D., Asheville N. C.

It is only during recent years that the laity as well as the profession have come to recognize the fact that pulmonary tuberculosis is a curable disease and that the prognosis of any given case is usually dependent upon the time the diagnosis is made. As a rule, the more advanced, the more hopeless the case. The various papers read before this society during the past few years have all mentioned this fact and have all advocated an early diagnosis; in fact, those who are now thrown mostly in contact with phthisical cases agree that by our modern methods of diagnosis, we should even recognize cases before the stage of cough and expectoration, if we wish to class them as "early cases."

Our papers in the past have usually been upon the diagnosis and the treatment and of the case when established, but a time is coming, and that soon, when much more attention is going to be given to prophylactic measures; the trend in this direction is only the furtherance of a scientific fact that an absolutely early diagnosis is requisite, and even better than that, prophylactic measures should be thoroughly understood by the laity at large and should more frequently be made the subject of discussion among the profession.

We have all along discussed what manner of business could best be carried out or conducted by our tuberculous patients, (from his own standpoint) especially those whose financial condition was such as to render it imperative for them to make their daily living. It is rare indeed that I have heard even an intimation that the business of a tuberculous patient was anything of a menace to the public at large, and it is for the purpose of provoking a discussion in this direction that this paper is presented.

The whole civilized world now accepts the fact that pulmonary tuberculosis is a contagious disease; not contagious in the extreme, but to an extent where any individual who presents a lowered vitality and is liable to develop the disease when coming in contact with a the same; the entrance of bacilli into the human economy, in proportion to the supposed most liable routes, being, first, by the breathing tract; second, by the alimentary canal, and third, through wounds of abraided surfaces externally.

When we have determined that any given individual is a sufferer from pulmonary tuberculosis our first duty is to inform him of the fact, and although it may for a time depress him to know the truth about himself, it is only in knowing this that he will follow the directions which we give him and will then place himself under the best possible conditions and surroundings for improvement. Our next duty should be to consider if the individual is in any way a menace to those with whom he is thrown in contact. We should instruct him in regard to the care that must be used in his own home. We should instruct him carefully regarding the danger of infection to the members of his own family or his friends and, if upon a thorough investigation of his case, we find that his vocation is one which renders him liable to be a source of infection to the public at large, there *should* be some method by which the public can be protected. Preventative measures are going to receive much more attention in the future than they have in the past, and in this one direction in particular do I expect to see in the next few years that certain states or municipalities will pass laws regarding the same.

We have already advocated that tubercular patients should not be allowed to take charge of public halls or places where the public at large assemble. The reasons for this are obvious and are now well understood. We have, however, in this country been particularly blind to the fact that many of the clerks who handle our breakstuffs are in themselves a virulent source of infection. We must not lose sight of the fact that those suffering from this disease have constantly infected hands and neither must we lose sight of the fact that it is now well recognized that when a patient, suffering from pulmonary tuberculosis, is coughing, that innumerable small globules are forcibly expelled and that these globules contain myriads of tubercle bacilli.

I would not be understood as meaning that the danger from infection in these cases is extreme or that the public at large

should be led to look upon these patients as lepers or that they should be made to feel that they should be ostracized from society and the public, but I nevertheless do contend that if any man has a tuberculous disease, is coughing and expectorating a tubercular material, that party should not be allowed by the State to sell or manufacture bread-stuffs of any character whatever. I realize that it would be extremely difficult in certain cases to say whether an individual should be allowed to practice his trade, but were a merchant or clerk has this disease, and to an extent that the same is well established and easily recognized, the teachings of science to-day must go to prove that there is more or less danger if they are allowed to so conduct themselves.

Butchers as a rule, seem to possess immunity; at least it has been our experience, extending now over three thousand tuberculous patients, that in few cases have we observed tuberculosis in one employed as a butcher. On the other hand, bakers have appeared to be particulaaly susceptible; whether this is on account of their working, as is so often the case, in damp basements, or is due to close confinment and long hours and work especially at night, I cannot say. Suffice it to say, however that we have had many patients who have come to us far advanced in this disease and who have been actively engaged in the manufacture and sale of bread up to the very time of their leaving home. Again, take for instance, our green vegetable man, our milk or butter man, our fish man, our fruit man, in fact, the same reasoning applied to any one who handles the food you purpose to eat, and knowing as you do to-day, that there must be a certain element, aye, a considerable element of danger of infection from all we eat if it is handled by a phthisical patient, do you want him to handle what you eat, or do you want him to handle what your family eat? And if not, should we not be just as careful of our patients as of the members of our own family? And further, if you agree that you do not want such food-stuff's yourself, should you not also make some effort to protect the public at large?

Should a tuberculous individual be allowed to conduct or clerk in one of the stalls of our city market?

It is true that we would thus get infected in homeopathic doses, but are not even homeopathic doses of a tubercular material dangerous when the person is in that condition where he is susceptible to the disease? Should we not at least exclude the extra danger by requiring that those who handle our bread-stuffs shall be subject to the same regulations as if they suffered from diphtheria, small-pox, or other diseases recognized as communicable ?

It is true as regards the great bulk of bread-stuffs purchased in open market being subjected to sufficient heat to destroy such organisms as might find lodging from the handling of the same, but many of our foods are eaten exactly in the same condition that they are purchased, and if this disease can be conveyed by the alimentary canal route, and the same has been well established, some decisive action should be taken.

It is now plain that bovine tuberculosis and human tuberculosis are not exactly identical, and while it is possible for human tuberculosis to cause infection in cattle, it is not prone to do so. However, as stastistics have undoubtedly shown that where cattle are under the charge or care of a person with tuberculosis that more of these cattle develop tuberculosis than what is usually met with in herds, it should stimulate our municipal authorities to see that those who have charge of the dairies which supply the people under their jurisdiction, should not allow tuberculous individuals about their premises or to have charge of their stock.

In the literature which is distributed by the State Boards of Health of Maine, Massachusetts, Connecticut and Ohio, this fact is pointed out and the local Board of Health in most of these States see that the same is enforced. It would be well if the municipal authorities in charge of health resort cities would see that the same supervision is carried out in the dairy herds which supply these cities, and as far as possible the same regulations should apply to all centers of population.

Our best market men realize that it is to their best interest not to employ diseased or ailing clerks, but nevertheless there are others who on account of the low wages at which these clerks can be obtained, avail themselves of this opportunity. I would not be understood as reflecting upon any store keeper, market man or individual in particular, but I will wager that there are very few physicians in the country who cannot site cases wherein they know of tubercular patients being employed in certain stores and these same physicians privately boycott these places on account of such ailing clerks or market men.

I expect some one to get up and state that the time has not arrived when the State or city can interfere in this matter, and I expect some one else to get up and state that the danger of infection is so extremely small that the whole matter is ridiculous;

my reply to those who may make these statements, will be that they have not studied the subject of tuberculosis and that they are to-day where their brothers were many years ago when the State and municipality first began to exercise a controling hand in such contagious diseases as smallpox, scarlet-fever, typhoid fever and the like. The time may not yet be ripe for the State to take hold of this matter, but it will never get ripe, unless by agitation. Many of our States are already passing laws regarding the care and disposition of poor tuberculus patients and this is only the beginning in the right direction. State hospitals and State Sanitariums are being established, and the State authorities in many cases are now insisting upon a thorough disinfection of the rooms where consumptives have lived and died. These same States are beginning an undertaking of which they as yet have but very little conception. Every institution which has been opened is always kept crowded. To the one who finds access, there is a thousand who should. When the State realizes this thoroughly it will not then be so much a question of housing and careing for the thousands who are already suffers from this disease, as it will be how can this disease be prevented ? When the State arrives at this point, we, as physicians, will be compelled under heavy penalty to report to the State every case of this disease occuring in our practices where the patient makes, handles or disposes of bread-stuffs to the public at large.

Rheumatism and the Salicylates.

By F. R. Millard, M.D., San Diego, Cal.

In the July issue of The Charlotte Medical Journal a paper was printed which was read at a meeting of the Buncombe County Medical Society, commending the use of salicylate of sodium treatment for rheumatism. Neither in the paper or in the discussion which followed the readiug of it is there any intimation that there is any contraindications for its use, nor any limitation as to the time during which it can be profitably taken. The doctor who prescribes this drug in 20 or 15 grain doses every 4 hours to a patient that has chronic middle ear disease is only one degree more reckless than is the one who gives quinine in like amount under like circumstances. All the good a rheumatic patient can get from the salicylates can be gotten in 8, or at the most 10 days, and a longer continuance in full doses is useless, if not injurious. This is not saying that for other conditions doses of 2½ to 7½ grains 3 times a day are not permissible during a longer period. Nor was the fact mentioned that, when the soda salt appeared to be doing the patient no good, ammonium salicylate would occasionally act satisfactorily, and when neither of these could be borne strontium salicylate can generally be substituted with advantage. And in this connecton it would have been well if the other fact had been mentioned, (?) that strontium salicylate, 60 to 90 grs. daily, is as nearly a specific for treating sciatic rheumatism as any drug is for any disease. But the most important omission of all was the omission to emphasize the fact, that while the salicylates can give the patient relief from pain, none of them can have any power toward preventing cardiac involvement. So certain is this, that if one should assert that salicylates had done more harm than good to rheumatic patients, I would not deny the assertion. When they are prescribed for such patients their limitations should constanly be kept in mind.

The writer says if it becomes subacute or chronic iodids of potash with stillingia, pokeroot, dandelion, or pricklyash should be given. Black cohosh which is more valuable than all of them, is not mentioned. I like best to give the iodid in 5 to 10 grain doses 3 times a day, to each dose of which 15 to 20 ms. of the Fluid Extract of Black Cohosh is added. This is criticised as inelegant, but not as being inefficient. If the doctor is a stickler for elegance and the patient fastidious cimicifuga 2 grain capsules may be substituted, but while half a loaf may be better than no bread, no one has yet convinced me that a a part is greater than the whole.

With discussion following the reading of the paper, the astonishing statement is made, that it is rare to see rheumatism in a child under 6, or in a man over 50. Since this statement went unchallenged, we must conclude that Buncombites are exempt from rheumatism to an unusual degree. Twenty-seven years in the southwestern corner of the country had bred in me the delusion that no part of the country could claim a greater exemption than Southern California. But Buncombe county must take the cake. From 1874 to 1888 my practice was a general outside one, but since the latter year it has been all office work. During these 27 years 9 men and 7 women over 50 years of age have been treated for acute rheumatism. Also one nursing child, one boy 5 years old, and a girl of 8. While my experience would be paralled by that of some of our oldest doctors, some of the younger ones would give a long list of babies treated for

rheumatism. But since a goodly proportion of these cases have fallen into our care we know that both rickets and infantile scurvy have been diagnosed as rheumatism and treated as such. "'Tis true and pity 'tis true," that a large minority of doctors are incapable of recognizing infantile scurvy. In marked contrast to my experience with rheumatism here is what happened in Wisconsin. Between 1860 and 1874, sixteen children under 10 years of age were treated for acute rheumatism all of whom recovered. To the first of the 16 I was called to treat her for the third attack. A cardiac murmer had come on during a former attack. A sister of this girl had her first attack when 4 years old, and at no time was there any cardiac murmer. At 7 she had her second attack and for several days was treated by an old granny. During the second day of my attendance a murmer was detected which was permanent. These two were the only ones so afflicted. Treatment was by mercurials, alkalies, and anodynes. When mercurials were indicated calomel was used followed hy epsom or Rochell salts. The alkalies were either potash or soda bicarbonate, and the anodyne was always an immitation dovers powder, in which nitrate of potash was the diluent. As soon as acute symptoms were well controlled cimicifuga was given, and when possible to induce the parents to do so, was continued during three or four months. I was induced to this after having seen much benefit from a like course after Sydenhams Chorea in children. There is no drug, nor any combination of drugs, that can compete with cimicifuga in curing children and pregnant women of this variety of chorea. Statistics collected both in this country and in Europe show that of children who have had chorea a large majority acquire acute rheumatism during adolescence, and that only a small minority live to the age of 35 years. Bearing this in mind my experience is interesting if not instructive. There were 13 cases under 10 years of age and cimicifuga was relied on to work the cure, and where possible, was continued during three or four months after subsidence of chorea movements, and most of them were under direct or indirect observation for ten or more years afterward and so far as known, only one had acute rheumatism afterwards. Three of them died before puberty, one from diphtheria, one from cerebro-spinal meningitis, and one from pneumonia following measles. Two died during adolescence, one from an accident, and one from typhoid fever. One died at 27 from placenta previa, and one at 32 from tuberculosis. One of the 13 might with some propriety be omited from the list, and this is the case that subsequently had rheumatism. When the girl was 7 years old I called to treat her for chorea. She had rheumatism a year or so before, but the heart had escaped. The chorea yielded quickly and efforts to induce the parents to continue the cimicifuga were unsuccessful. My next call to her 7 years later, and at 4 o'clock a. m., during the intervening years there had been several attacks of rheumatism, but none so severe as this. Both lower extremities were wholy involved and the upper ones to a lesser extent. There was mitral regurgitation and cardiac enlargement. Prognosis unfavorable. About midnight I was again called and found chorea affecting the face, neck and upper extremities. In spite of all treatment I could devise chorea became wellnigh universal, and continued until her death, 22 hours later. Under chloroform anæsthesia to the surgical degree, single muscles and small groups of muscles could be seen or felt in motion. This was the first time I had seen chorea come on during severe acute rheumatism. I have since seen it both in children and adults, and no patient has survived the onset of the chorea so long as 36 hours.

Probably every patient with chorea will require other drugs than cimicifuga. But they should be used to accomplish a definite purpose, and when that is accomplished their usefulness ends. If, instead of following the routine recommended in our text-books (which has been slavishly copied from European writers) all children having chorea previous to the completion of the second dentition were promptly and judiciously treated and the cimicifuga continued as above indicated, cardiac complications would then become as infrequent as they now are frequent.

We should not expect to modify the diathesis after the second dentition is completed, but previous to the middle of that period it is often possible.

At the rist of making this paper of undue length, I shall refer to the case of C. G., who was the fourth son, and the seventh child in a family of five boys and five girls, and the only one of the ten that never had rheumatism. Every one of the girls had acute rheumatism before she was ten years old. None of the boys had it until after puberty, but all of them except 1 had one or more attacks during adolescence. At 2 years he had eclampsia nutans, and was treated on the assumption that it was as closely related to chorea as chorea was to rheumatism. It did not last long and cimicifuga was given somewhat irregularly during three months. When 8 years old he

was as promising a boy as either of his brothers had been at that age. He then fell a distance of 8 feet, striking flat on his back on frozen ground. The first glimmer of returning consciousness was on the 4th day and after having had an uncounted number of epileptiform convulsions. It was 10 days later before consciousness was fully regained, and a week later before he could assume an upright position. It was found that after keeping it a few minutes the old nodding returned and compelled him to lie down again. Cimicifuga was again prescribed, and gradually the nodding passed off, and the intervals between the fits lengthened until at the age of puberty they came once or twice a month, and so continued to occur until his death by accident when 25 years old. Physically he was a fine specimen of young manhood, and his infirmity did not apparently effect his intellect. On the one hand it might be claimed that the long continued exhibition of cimicifuga favorably modified the rheumatic diathesis. On the other hand it might be claimed as upholding the theory, that there is to some extent an antagonism between epilepsy and rheumatism.

The Treatment of Some Chronic Conditions of the Intestinal Tract.

By David E. Bowman, M.D., Professor of Obstetrics, Toledo Medical College, Toledo, O.

It will be generally conceded that chronic diseases of the intestinal tract are among those which are most obstinate to treatment. Some of them have indeed been considered wellnigh incurable, the most prominent of which are the cases of so-called "camp diarrhea," occurring in the old veterans of the late rebellion, and also cases of pseudo-membranous enteritis. Most every physician of ten years experience or more has met with such chronic intestinal disorders in old veterans and prescribed temporarily for the acute attacks, regarding a cure or permanent relief as one of the things yet to be accomplished by medical science. Last fall a typical case of this kind presented itself at my office, and as the results of the treatment adopted were unusually successful I have reported the essential features of this case in the hope that some one else may be equally benefited.

The patient was Mr. M. A., aged 55 years, a resident of one of the small towns adjacent to this city. He was pale, emaciated, had an expression of exhaustion, and gave a history of progressive loss of health extending over a number of years. He consulted me for an acute exacerbation which had lasted longer than usual; in fact, he had received treatment from three physicians during a period of a month or two, without deriving any benefit, and was in a melancholic condition of mind. He complained of anorexia, indigestion, flatus, and frequent watery stools containing undigested and fermenting particles of food. In his own vernacular, "whatever he ate passed right through him." I prescribed divided doses of calomel, to be followed by sodium sulphate, one drachm, in a cup of hot water after rising the next morning, after which copious draughts of hot water were to be taken until the intestinal tract was completely flushed out and the kidneys acted freely. He was also ordered to wash out the large intestine with three or four quarts of normal saline solution. This was followed by five grain doses of tannopine every two hours during the waking hours of the next day. He was instructed to take nothing into the stomach during this time unless he became very hungry, in which case he was to eat a small piece of bread, toasted so slowly that it was dried equally throughout and the outside carbonized or reduced to charcoal. He was very much improved by the cleansing process, and I continued the use of tannopine, five grains, every three or four hours, to be taken always on an empty stomach. A carefully regulated diet was now permitted. I also prescribed liquor potas. arsenitis, four minims, after each meal, not only as a tonic, but also for the specific property of this drug in preventing the lienteric condition—a property discovered and advocated by Ringer. He rapidly improved upon this treatment, which was resorted to for several weeks, after which time the arsenic solution was dropped, but the tannopine continued in five grain doses twenty minutes before each meal for one month. He was then ordered to discontinue medication for one week and report. Though he experienced no bad results from the change I deemed it safe to administer the tannopine one month longer in smaller doses, viz., three grain doses before each meal. He is now in a much better state of health than he has been for many years.

It will be noted that in the treatment of this case I have referred to tannopine as a most essential factor. About a year ago I contributed an article on infantile diarrhea and its treatment, in which attention was called to two especially valuable properties of the drug in this class of cases, namely, its antiseptic and astringent action. Tannopine exhibits the effects of tannic acid

and formaldehyde, which are combined in such form that the drug passes unchanged through the stomach and sets free its constituents in the intestinal canal. Owing to this fact it does not exert any irritating influence upon the gastric mucous membrane, while in the intestine the astringent and disinfectant ingredients are so gradually liberated that the effect of the drug extends down into the lower part of the bowel.

To fully illustrate its action in chronic intestinal disorders I have subjoined the following three cases:

Case II.—Mr. S., railroad official, has been under my professional observation for four years. Previous history for the past ten years is a perfect type of what is termed by Dr. Philip S. Wales, in the second volume of Pepper's System of Medicine, page 763, as "pseudo-membranous enteritis." I quote briefly from this work: "The periodical formation and discharge of mucous exudates vary in physical appearance and frequency. The discharge may occur daily with every stool, or at irregular intervals, a week, a month, or longer, but usually in twelve to fifteen days. The recurrence may be precipitated by irregularity in diet, exposure to wet, cold, etc. The paroxysm is marked by tormina or severe pain, which may resemble that of colic or that of a biliary calculus, etc. After the paroxysm has lasted two or three or more days the membranous exudates are voided, generally with a spontaneous movement."

In my case the exudates resembled a mucoid mass, dark colored, copious in quantity and odoriferous. After the passage there was a gradual amelioration of the general and local symptoms, with a feeling of exhaustion. I gave the patient several extended courses of treatment during the time mentioned above, trying all the old and newer methods of treatment, but without permanently beneficial results (and here allow me to mention that he had been treated by many physicians in the years previous to consulting me).

Meanwhile the patient was losing weight and changing in general appearance. He made a study of his own case and became convinced that there was a partial occlusion at the left superior angle of the colon. He implored and insisted on an exploratory operation. After consultation with a prominent abdomen surgeon who advised against it, he still insisted, and an exploratory incision was made. No abnormality could be found. He recovered promptly from the operation, and the symptoms remained the same. He took no treatment for one year or more, and then only at my solicitation to try the new remedy tannopine. He has slowly but surely improved under its administration in six grain doses before each meal, with a laxative pill at bedtime. Anorexia has disappeared; the paroxysms are less frequent, general appearances decidedly better, and he has gained 15 pounds in weight. The treatment will be continued with the hope of permanent benefit in which the prognosis has always been hopless, not dangerous to life, but regardless of any treatment will last many years.

Case III.—Mr. G.. farmer, aged 45, an apparently healthy man, had been under my observation for the past few years. In late months he was having more frequent attacks of intestinal indigestion and consequent diarrhea than formerly. Undoubtedly, he had a chronic catarrhal condition of the alimentary canal of five years standing, exacerbations being apparently caused by indiscretion in diet. April 15th, he called at my office for treatment, as he was becoming alarmed at the frequency of the acute attacks. I repeated the preparatory treatment as in case one, and followed with small doses of tannopine, given frequently for the first week or two, and then in four-grain doses before each meal for one month. Better results could not have been anticipated. He is practically a well man to-day.

Case IV.—Mr. A. S. D., aged 36, for the past year has been troubled with alternate constipation and diarrhea, and the latter becoming difficult to control he applied to me for relief. The patient had been treated for constipation for some time without benefit. Here was a case which in addition to the ordinary regulation anti-constipation pill or mixture an alterative and antiseptic treatment directed to the mucosa of the tractus intestinalis was indicated. Naturally enough I prescribed tannopine in five-grain doses, every two hours, until the stools became normal, after which it was given in six grain doses twenty minutes before each meal for one month. To regulate the movements of the bowels and to establish a regular habit, the well-known aloin, strychnia, belladonna and ipecac chocolate tablet was taken, one every evening and morning. The result was all that could be desired.

In addition to these cases of chronic intestinal diseases cited above I have had excellent results from tannopine as an astringent and antiseptic in the treatment of typhoid fever, of which I prescribed two cases in order to illustrate the dosage and manner of administration.

Case V.— W. G., age 16 years, was very ill with typhoid fever, which had

continued for two weeks. The abdomen was very tympanitic and the excessive diarrhea was exhausting the patient rapidly. At this time he came under my care, and instead of using my almost routine treatment I prescribed calomel, 1½ grains, in broken doses during twenty-four hours, alternating with five grain doses of tannopine. As the patient improved, this treatment, slightly varied, was continued until the stools became normal. Other methods, of course, were used to combat the complications as they arose; tepid sponge baths when the temperature exceeded 102 deg., followed by an alcohol rub. There were few untoward symptoms, and at the end of one week the temperature was normal. Convalescence was rapid and uneventful.

Case VI.—E. E., aged 30, previous health good, was seen early and diagnosis made as soon as regular symptoms occurred. He was first put on the Woodbridge treatment and kept upon it for twelve days, but grew worse daily, and we feared a fatal result. On the 13th, day he had a hemorrhage, followed by tympanites. His condition was now considered grave, and owing to my favorable experience with tannopine in case V I prescribed it in ten grain doses every hour for five hours, and then as indications were better, the hemorrhage having apparently ceased after the first dose, the dose was reduced to eight grains every two hours, He gradually improved under smaller and less frequent doses. In ten days he was convalescent. It is only logical to conclude that in this case we had in tannopine a sheet anchor for hemorrhages, harmless and efficient. I believe the earlier use of tannopine would have been prophylactic.

In conclusion I would say that judging from the results obtained tannopine is plainly indicated in these classes of cases. To obtain the best results, howeuer, it should be prercribed not only in the proper dose but at the proper time, and its administration continued until it has produced its full effects, antiseptic, astringent, and alterative. I feel sure that we have in it a valuable addition to the materia medica.

The Care of Breasts in Nursing Mothers.

By Dr. George Barksdale, Richmond, Va.

This subject is of so much importance that I have wondered that no more has been written about it than has. It is of so much importance that much depends upon the good management whether or no the nursing child will receive the proper nourishment to withstand all the diseases of infancy and to be well and in robust health of childhood before disease overtakes it, when, as we all know, the mortality is not so high.

Therefore, I propose to discuss the method of caring for the nipples, the prevention and treatment of diseases, the method of obtaining a generous flow of milk and of keeping the mother in a healthy state during the period of lactation.

Unfortunately our laws are so loose in regard to the restriction placed upon midwives that in Virginia the most ignorant negro woman without the least training is permitted to take charge of obstetric cases without a question, which frequently require all the judgment and skill of a practiced obstetrician.

Such being the case only too frequently the physician is called to see a pale, weazened mother almost too weak to stand, while the child is emaciated, fretful and literally starving from want of proper feeding. If the mother's milk is not gone it might as well be, for it may be so poor that the child will not thrive upon it. When such a thing happens to a nursing mother nine times out of ten the attendant, be he physician or nurse, is partially responsible, and that a remedy for such an unfortunate state of affairs is a thing long desired.

Without proper management of the puerperium there is no known single remedy that can be relied upon to aid the production of milk. And so to secure and retain a bountiful supply of milk is frequently of as much importance as a major operation in surgery, for it means the retention of health by the child, if not its life.

Unfortuately, in high life, child-bearing and nursing are the unavoidable evils of life and members therein endeavor to shun one, if not both, because of the care and detriment to the physical beauty of mothers, caused by nursing, consequently a few mothers deny their milk to their children and resort to artificial feeding. Of these mothers suffice it to say that they do not deserve so exalted a title, and luckily the number is few.

One of the most potent causes of a deficient milk supply in nursing women is the withholding of proper food from the mother during her confinement which is alltogether foolish and mischievous, and we will never know how many innocents have forfeited their lives to the nonsensical tea and cracker diet of old meddlesome midwives.

It is nothing less than a natural, sensible thing to do when the woman has gone through an exhausting labor and that is to feed her well. I hope I will not be misun-

derstood, hence I simply mean that the mother should have enough wholesome, readily digestable food, and in sufficient quantity to maintain her own vitality at its normal standard, but enough to produce milk as well. A diet of meat soup, potatoes, boiled eggs, milk, oatmeal, milk toast and plenty of water should be allowed, and after a day or two meats should be sparingly allowed, and as shell fish are such good milk-producers they may be allowed. The woman, before her confinement, should be advised in regard to the best way to lengthen her nipples, especially if she be a primipara, and the breast should be regularly massaged before the child is born by anointing the fingers with petrolatum and stroking the breast firmly from base to nipple which serves to stimulate the flow of milk even before the birth of the child. The nipples should be gently pulled out with the fingers or a glass nipple shield should be used until they are of sufficient length for the child to nurse.

For tender nipples it is advisable to paint them with glyceride of tannin and alcohol for several days, and if when the child begins to nurse they become fissured it is best to paint them with tincture of benzoin, or boric acid solution, first before the child nurses a solution of cocaine may be used and afterwards washed off, or a nipple shield may be used. When the flow of milk is established and the child is not able to consume it all it is best to withdraw some of it to prevent pain on the mother's part. This may be done with a pump or an instrument known as a breast pipe. It is folly on the part of the mother to save her milk. I mean by this when the flow of milk is scant mothers often feed the child from a bottle during the day and save the breast milk for feeding during the night. Mothers should be told that this lessens their flow of milk and it should be discontinued.

When symptoms of an abscess develop the breast should have the milk withdrawn and the tumors produced by the overdistended ducts should be massaged until they disappear; if this does not arrest the symptoms, liquids should be withheld from the mother as completely as possible and the breast should be anointed with ointment composed of camphor, opium and atropia and lanolin, while compound jalap powder is given to secure abundant actions from the bowels and as a diuretic. If the symptoms still continue use hot fomentations until the abscess forms, then open with a free incision radiating from the nipple. Wash out with bichloride solution 1-3000 and dress.

Frequently the mother for several weeks after the child is born continues to have the lochia, which in many instances is so rich in blood as to sap the strength of the patient faster than food can supply it, and such being the case the milk supply fails and becomes so poor that the child does not find sufficient nourishment, and soon becomes a prey to disease or to bottle feeding which is just as bad. When such is the case the uterus should be carefully curetted and the mother cautioned not to overexert herself and to eat plenty of good beef, oysters, eggs, crabs, and other blood-producing food and I have been giving prescriptions as a blood-maker and tonic. It is a vile dose, but then—

℞. Tinc. Nux. Vom., 8. cc.
Ac. Nitro Mur Dil, 8.
Vin Ferri Amon., 60.
Elixir Calisaya. qs. 120.

The attendant can never be too careful of the child, and I am certain we would have fewer ills of infancy and childhood were we to use plain common sense in the management of the breasts.

3900½ Williamburg Av.

American Therapeutic Contributions to Medicine.*

By B. T. Whitmore, M. D., LL.D, New York City.

The mere fact that we have put behind us nineteen centuries of this era and that before us opens the twentieth represents no divergence of the ways in logic and in critical history of our art. The medicine we are to practise in the early Twentieth Century has come down to us from the late years of the Nineteenth Century; the purely arbitrary and convenient change in the notation of the years stands for no critical period in medicine and its allied arts. Yet the time is a very fit one in which to occupy our thoughts with a hasty consideration of the great advance which medicine, as all sciences, has made during the latter fifty years of the century just closed. The place also is equally fitting, for the period under review is included within the life of the American Medical Association. This body has been the conservative element in all this medical advance. Not conservative in any sense of retarding progress; that it never could be, for with scarcely an exception the men whose earnest labors have produced this progress have been enrolled up-

*Read in the Materia Medica Section of the American Medical Association meeting in St. Paul, June 7, 1901.

on the membership list of this body. On the other hand, it has been a truly conservative agent in that it has sedulously conserved the old traditions of our art, and has directed all the recent progress with strict regard for the standards established by the wisdom of the fathers. Thus in time and place it is appropriate that we occupy a few minutes in signalizing just a few of the American contributions to medicine in the last half century.

The first great step taken in advance is the recognition of specialization in the medical arts. That the last half century has witnessed such progress needs no exemplification. Those of us here who are yet young need only compare the practitioner of today with the old family doctor of our early years who combined in himself physician, surgeon and pharmacist. At the present day medicine and surgery have been absolutely divorced from pharmacy, and the advantage of this divorce has long since been recognized. In like manner, and almost to the same degree, medicine and surgery have been specialized apart, and the advantage is being gained in the treatment of suffering humanity. Sub-division has proceeded still further in medicine and surgery until it has come to pass that our best equipped hospitals afford special wards to meet the needs of modern science. The same principle is manifest in the number of national societies and associations, each drawing its membership from those who are most interested in this specialty or in that.

Modern surgery is recognized the world over as distinctly due to American skill. It could not be otherwise, for the surgery which hesitates not to penetrate the deepest cavities of the body and explore diseased tissue is only possible with the aid of anesthesia. The whole subject of anesthesia is an American discovery and lies just outside the early limit of the period under review. The first discovery was the production by chloroform or ether of general anesthesia which made extensive surgical operation a possibility. Next came the production of topical application, either subcutaneously as in the case of cocaine, or superficially as in the method dependent on the use of ethyl chloride or some similarly volatile substance. While we may not claim the discovery of the anesthetizing value of cocaine for America, it is fair to claim that it sprang into popularity only after it had been employed by brilliant American surgeons. Now at the end of the century we find French surgeons winning fame with the anesthesia of spinal puncture only to discover that the operation was first given to science by an American. It would be superfluous before this section to recite even selections from the list which will readily suggest itself to your minds of the many brilliant operations in minor as well as capital surgery which American surgeons have made known to science. In fine it may be said that the American discovery of anesthesia has made modern surgery possible, and American methods of asepsis and antisepsis have made it practicable.

A similar review, brief or extended, might concern itself with the triumphs of American medicine which have been many and great in the half century. But to do so would postpone the particular branch of the subject which I wish to bring to your attention.

These high degrees of specialization as between the physician and the surgeon, as between the practitioner of internal medicine, of nose and throat, of eye and ear, of skin diseases, and the rest, can exist in their full perfection only in the larger cities where the morbid population is sufficiently large to afford the specialist a livelihood. But in the half century under examination the line has been more definitely drawn between the practitioner of medicine and surgery on the one hand and the practitioner of pharmacy on the other. Even in communities of some considerable size it is rare to find other than general practitioners, men who deal with both medical and surgical cases in all their sub-divisions. On the other hand it is rare to find even on our frontiers any community which can support a physician which does not also afford scope for a pharmacist as well. Fifty years ago it was by no means uncommon to find the general practitioner compounding his prescriptions rather than writing a draft on the science of the pharmacist to compound them. At the present time it would be surprising to find a physician who either does, or is able, to compound his prescription.

It should not be forgotten that pharmacy is a medicinal art. It is in this section of materia medica and therapeutics that this intimate connection should be recognized. In every case of disease the letter "P" is three times involved, thus: physician, pharmacist, patient. To the patient the pharmacist is as vitally important as is the physician. The diagnosis is of the physician, the treatment is of the physician; but before the treatment can reach the patient the pharmacist must carry out the orders of the physician as presented to him in still a fourth "P," the prescription. It is just here that the science of medicine meets the science of pharmacy and acknowledges its existence and its value.

To bring plainly before us this half-cen-

tury advance we should compare the prescription of 1850 and that of 1901. The whole story is told therein to the comprehending mind.

Fifty years ago every prescription began with a cabalistic sign derived from the older alchemy. So far as it had any meaning at all it meant "God help" somebody, presumably the patient. This was called the superscription when the name of the patient was added. After this followed the inscription, a most complicated proceeding; for it began with the basis of one or more drugs; then the adjuvant of a drug or so; next came one or more drugs as corrective to prevent the basis and adjuvant from going so far in the healing art as to produce manslaughter; last of all the vehicle to postpone the rising of the patient's gorge. Having thus displayed the imagination of the physician and the resources of the apothecary shop there followed the subscription which told the pharmacist what to do with the whole mess. Last of all came the signature wherein the physician inscribed the directions for the patient and his own name as authority for the whole concoction. It reminds one of the prescription of one wiser than his own time:

> Double, double, toil and trouble,
> Cauldron boil and kettle bubble;
> ——ditch-delivered of a drab,
> Make the mixture thick and slab.

At the present day the common prescription reads more simply. Take of tablet No. 600. Signature.

The advance in pharmacy has followed with equal steps three distinct lines. One leads toward simplicity, one toward elegance, one toward positive and measurable action. In this statement is summed up practically the research of the half century that has just closed.

The first of these is simplicty. At the beginning of the period under review no physician ventured to give the particular remedy which his diagnosis showed to be necessary, the condition of the drug was such that it was not safe to neglect the adjuvant, the corrective and the vehicle. One was to do certain work in the human frame, "God help us" it might. The next was to help it on the main road. The next was to stop it when it had done enough or to prevent it from side-tracking and doing a lot of things that it was desirable not to do. The advance in pharmacy as a strictly medical art has made it possible to administer the basis in the amount needed and to let it go at that.

The next point is elegance. Some of us who are now in mature years, yet far this side of age, will recall the doses of our adolescence as the reverse of elegant in the pharmaceutical sense, and their lack of palatability will promptly recur as a bitter memory; merely to mention salts and senna or calomel and jalap will after the lapse of years bring a reflex bad taste in the mouth. Elegance, and to a less degree simplicity, are for the most part matters of form. The essence of the change which fifty years has seen in medicinal pharmacy lies under the head of positive action.

That which has done most to advance modern surgery to its commanding attitude is that every incision is directed to a distinct end, nothing is done for which a good reason cannot be supplied. So in modern medicine, every remedial agent that is applied is administered to produce a certain definite and positive result; nothing is left to chance and drugs loosely assembled under the head of adjuvant or corrective. That medicine has gained this precision is almost entirely due to the fact that pharmacy has recognized itself as a medical science ancillary to therapeutics, has always followed upon medical discovery with equal pace, and in many cases has taken a step in advance and has pointed the way for the practitioner of medicine to follow. This positive action of drug material has been contributed to medicine by pharmacy along two lines which together may be used to cover the whole range of medicinal agents. The first is chemical assay. The practitioner who prescribes a fixed quantity of tincture or the extract of any given substance in the materia medica determines the amount to be used by his knowledge of the therapeutic value of such agent. He has therefore the right to expect a certain result from the specified quantity. Pharmacy no longer leaves this to chance. Each tincture and every extract must be, and is, chemically assayed, wherever possible, to establish the presence of the maximum amount of the therapeutic principle. In the case of certain agents, not only the blood serums and organic extracts but as well the whole range of the glucosides, the ordinary manipulations of chemical assay prove at fault. Pharmacy, in this instance, has conferred upon medicine one of the most noble discoveries of the period under review in the establishment of the principle of physiological test. For the intractable group of remedial agents this does what chemical assay does for the others, namely it establishes in positive terms the exact therapeutic value of such agents as strophanthus, digitalis, ergot, and the immunizing, curative and diagnostic serums. Medicine has no greater triumph to record than this, a discovery of pharmacy.

It would take up your time to little good were I to attempt a sketch of the individual contributions of pharmacy and operative chemistry to medicine in the last fifty years; the mere listing of the names would fill a volume. It is enough to remember that the whole subject of synthetic chemistry is a development of the last half century, that all the serums have been added within ten years, that we are now just on the verge of isolating the active principles of several organic extracts and rendering the whole list as safe, stable and positive as that of the suprarenal capsule.

While all this research has benefitted medicine it should be noted in conclusion that it has reacted with equal benefit on the profession of pharmacy as well, thereby better equipping it for future development along the same and amplified lines of therapeuctic usefulness. The magnitude of these operations of assay and physiological test, in general of establishing fixed and positive values for every drug in the pharmacopeia, is such as to place them beyond the power of the ordinary dispensing pharmacist. To meet the need there has grown up within the last quarter of a century a group of pharmaceutical manufacturers whose pride and glory it is that they have the equipment with which to produce these positive results. The code of ethics is as binding on them as it is on the physician. Their one aim and object is to provide the dispensing pharmacist with drug agents so positively determined as to efficiency and therapeutic value that the physician may have no fault to find with the medicines on which he relies to produce certain results in each diseased condition which he is called upon to treat.

America has made wondrous contributions to surgery and to medicine. But I would not have it forgotten that medicine is under no less a debt to the discoveries and developments of American therapeutical pharmacy.

The Influence of Morphine on Gastric Secretions,

Professor Riegel (Medical Press, July 3, 1901) says that the experiments that he has made were in agreement with those performed on animals, and were to the effect that morphine exercised no inhibitory influence on the gastric secretion, but that, on the contrary, its principal influence lay in exciting the secretion, even if the effect was not immediate. Only at first morphine appeared to check the secretion slightly, but the slight check was soon more than made up by a considerable increase.—Whether the long-continued use of morphine tended in the end to lessen the secretion, the writer's own experience did not allow him to decide. In his experiments on dogs, even when continued for several days, he never observed any diminution of the secretion. At the most intensity of the stimulating effect in that direction was not so marked. The investigations make it clear that to give morphine in cases of ulcer of the stomach in the expectation that the acidity of the stomach will be diminished by it is a mistake. On the contrary, it appears desirable to bring into view and put into use the drugs that are known to have an inhibitory effect on the secretion. Whilst atropine and bellodonna arrest the secretion in a marked manner, morphine increases it. Morphine may therefore be given in affections of the stomach only in cases where hyper-secretion will do no harm. When, however, excessive secretion is likely to be harmful, belladonna preparations are to be preferred as in addition to the pain-relieving properties they also assist in checking secretion.

A Lotion for Erysipelas.

The following formula is credited by the Journal de medecine de Paris for May 19th to J. Hays:

℞ Carbolic acid, Tincture of iodine, Alcohol, — of each, 30 minims.
Oil of turpentine, 60 "
Glycerin, 90 "

M. For external application. Every two hours the erysipelatous parts may be painted with this liquid, as well as a small zone of the surrounding healthy tissues, and the whole covered with aseptic gauze.—*N. Y. Med. Journal.*

The Treatment of Tubercular Laryngitis

Dr. St. Clair Thomson said that the statistics of the Brompton Consumption Hospital showed that the larynx was affected in over 50 per cent. of fatal cases of pulmonary tuberculosis. As 70,000 persons died annually from this disease, at least 35,000 of them would require treatment to mitigate their sufferings. Few of the recent textbooks on laryngology contained any reference to the treatment of laryngeal tuberculosis by modern hygienic treatment. He deprecated the various local methods which from time to time had been vaunted. Their very number was eloquent of their inefficiency. Applications of lactic acid in the last ten years had obtained such vogue that they were used even in the most unsuitable cases, injuring the patient's health. Freu-

denthal, who used it freely, states that "it ought to be dispensed with as antiquated and barbarous torture of the patients." (Jour. A. M. A., March 16, 1901). We must look elsewhere than to surgical measures for progress in the treatment. This progress was ready to hand in the making of an earlier diagnosis. Then under this condition the sanatorium treatment with good food could be carried out, and rest of the voice should be insisted on. Catarrhal or obstructive affections of the nose and throat, and intercurrent conditions of the larynx should receive suitable treatment.—*Jour. Am. Med. Association.*

We notice in the daily newspaper that very frequently cases of smallpox are still being found in various parts of this large city. Where they come from and how they are infected are questions not easily answered. In many instances the sufferers are young children, and these children are supposed to have been around close to their homes and not wandering off in infected smallpox areas. The question then arises how the sickness originated and where did it come from? Certain it is that it must have been brought to the children. Who brought it and by what means was it infected? Probably a newspaper or a letter sent from some infected family at a distance is the important factor; but one thing is appearent, that we are not as a community thoroughly protected against smallpox by vaccination. Vacccination should be compulsory in all cases, and failure ,to comply with the order should be tantamount to a stay in jail until complied with. Vaccination should be systematically carried out every five or six years, and every child should be vaccinated, willingly or unwillingly, shortly after birth,and no person should be allowed to reside in this city unless they could furnish the health officer with facts of previous successful vaccination.—*Gaillard's Medical Journal.*

According to American Medicine, a curious superstition begins to gain a large number of supporters in Berlin. Three "doctors" named Grau, Freiberg, and Herrmann have establish a reputation for eradicating disease from men and beasts by driving it into trees. The cures are effected at night on Tuesdays and Fridays of the week of full moon. A needle is stuck into the skin over the affected part of the body, and remains there until a few drops of blood appear. The blood is collected on a sheet of paper, and the paper is rolled in the shape of a pill. The "doctor" then goes into a wood alone carrying this pill, selects a tree, and inoculates the bark with the pill. The process of bloodletting and inoculation is repeated three times.

The Glove as an Infecting Medium.

The surgeon cannot be too careful about his gloves. After operating upon septic cases it is exceedingly difficult to render the hand again aseptic for some time. Hence the advisability of wearing rubber operating gloves in septic cases. The surgeon is very apt to wash his hands with less care after an operation than before, and going from his operating room into his buggy or carriage draws on his driving-gloves or outdoor gloves, which, in turn, rapidly become infected with staphylococci, streptococci, etc., so that for days or weeks the surgeon's hands are reinfected by means of his own gloves. The same occurred some years ago to an obstetrician in whose practice several cases of puerperal fever arose. After most careful investigation and giving up his obstetric practice, it was found that his driving gloves had been contaminated by his hands from a case of scarlet fever he had treated some time previously. We would urge the necessity of wearing surgeon's gloves at all operations having pus, and we would suggest that the surgeon does not wear outdoor gloves for several days after a septic operation, so that the air and sunshine with the natural attrition of the skin, will destroy the infection, and not communicate it to the glove which may in turn reinfect the hands for days and weeks thereafter.—*Pacific Medical Journal.*

To Avoid Prickly Heat.

A writer in the Indian Medical Record tells how they avoid prickly heat in certain parts of India. This is done by simply anointing the body with cocoanut oil. Prickly heat, the writer contends, comes from removing the natural sebaceous secretion; therefore preserve nature's protective coat by abandoning the use of soap, and reenforce it by some lubricant such as the one recommended.

Looked the Part.

Tommy: You wore a red suit and horns at the masked ball last night, didn't you?

Mr. Hoamly: Why, no. I went as a cavalier.

Tommy: I guess pop was mistaken, then. He said he saw you, and you looked like the devil.—*Philadelphia Press.*

THE

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SUBSCRIPTION. $2-50 PER YEAR,

THE DOCTOR AS A "MARK."

A curious phase of "The World of Graff" is just now developing itself in the persistence and thoroughness with which the profession is being plied with circulars, pamphlets, and alleged periodicals lacking the *imprimatur* of "second-class matter," and all advocating investment in "high-class securities," wheat, mines and the like.

All of these schemes, however much they may differ in detail, are alike in one particular, that the doctor is to deposit his money in advance, and trust to the "broker" to get it back again. Some of these circulars, and they represent, perhaps, the fairest of the lot. are from bucket shops, which charge one-eighth of one per cent. on each purchase or sale. Without the use of any surreptitious methods, provided one staid in the game and neither won nor lost, 400 trades would absorb the whole of his employed capital. In mining stocks, of the grade usually promoted in this way, the game is a little different. With them the object is either a straight steal, or a "freeze-out" by means of real or pretended assessments. Still other invitations to invest are scarcely above the level of the "green goods" and "gold-brick" games.

It is hard to see why the doctor should be so persistently cultivated by this class of swindlers. Is he in such easy financial circumstances that he has money to spare for every alluring proposition, or is he so straightened as to be desperate? Or is he so confiding and trustful that whatever he has is at the mercy of any "grafter" who chooses to take it?

In dealing with men and schemes of this character, no advice can be given better than that of Punch to those about to be married, "Don't."

If any investment in the hands of men unknown to you looks inviting, go to your attorney, or better, your banker, and let him investigate the standing of the people behind the scheme. Bank references are easily obtained by those entitled to them, and the fact that such are omitted from the circular is usually *prima facie* evidence of fraud. All the cards are in the hands of the dealer, and it is his own game, hence a wise caution would consign all such literature to the waste basket or the fire. Any experience with such games may have to be paid for with the savings of years, broken health and a tarnished reputation.

MEDICINE AS AN EXACT SCIENCE.

Medicine is at once the oldest and the youngest of the sciences. The first man who, to assuage the pain of an injury, bathed it with cold water, or poulticed it with leaves, laid its foundations.

Its new birth came with the application of the stethoscope and microscope to diagnostic purposes. Still, until within only a few years, not even the most optimistic could include medicine among the exact sciences.

To-day, while there are many hiatuses in our knowledge, there are certain fields where our knowledge is sufficiently accurate to enable us to call it exact. In pharmacology, for instance, alkaloidal and assayed preparations, are supplied of such purity that a given dosage can be absolutely predicted to produce a given effect per kilo of body weight of animal.

In surgery the doctrine and methods of asepsis have in the best hands attained the force of a finished and demonstrated proposition.

In diagnosis the methods of blood and urine analysis are fully equal to those of any other department of natural science. Sanitary science has probably said the last word to epidemics of many forms if the intelligent co-operation of the laity could be secured. Life insurance, dealing with men in masses, is able to determine with the greatest exactness the probable duration of human life. The more elementary biological sciences upon which medicine is founded are within measurable distance of a solution of most of their problems.

We may fairly claim, then, that medicine is rapidly qualifying for membership among the exact sciences. The personal element can never be eliminated, of course, but the fact that for many physicians guess work will always be necessary does not mitigate against the thesis. The fact that some people can not make two and two into four does not make arithmetic other than an exact science. Medicine will be exact rather

in the sense of calculus, where the true solution is known to lie between two variables, and the probability of the correct solution lying at any given point between the variables may be shown, but which point it occupies can not be shown. It will be exact in the sense of astronomy, whose laws are demonstrable, but the application of which can not be made with arithmetical accuracy.

It will be exact in the sense of civil engineering, whose workers calculate stress and strain for given conditions and then treble or quadruple them for safety. If the twentieth century advances as much over the standard of the nineteenth as the nineteenth did over its predecessor, its termination will see most of the problems of diagnosis, prognosis, and treatment reduced to a form which, in masses at least, will have the full force of an exact science.

MODERN CIVILIZATION AND ADVERSE NATURAL SELECTION.

The fittest must survive is a biological canon which cannot be controverted so far as any animal except civilized man is concerned.

Civilized man deliberately goes to work to render it a dead letter. By the skill of his medical men, the life of every person, no matter how unfit to reproduce the race is prolonged to the last moment, with the not infrequent effect of leaving a numerous progeny, where, without interference, the unfit would have perished without issue.

Modern warfare, even, so far as death in action is concerned, puts a premium on small men, because they are more difficult for a bullet to hit. The chief source of adverse natural selection however is in industrial accidents. Inertia and gravitation are man's never sleeping foes.

The use of high explosives and high tension, electrical currents can never be made absolutely safe. Steam is a chained giant who may break his shackles without warning.

What a waste of mentally and physically sound humanity is implied in the statement that in 1898 one trainman in 150 in the United States was killed in the discharge of his duty. Yet this is rather under than over the average for ten years past. It is regretted that figures for the Railway Mail Service are not at hand, but the mortality of these carefully selected men cannot be much below the average for trainmen. Deaths from accident among coal mine employes equal 2.64 per thousand per year, for ten years past throughout the United States and Canada. Statistics of accidents in other trades and callings are not obtainable, yet if one regards such admittedly hazardous occupations as lineman, quarryman, diver, logger, dynamo-tender and the like it is evident that the aggregate number of lives suddenly lost by accident must be very large, and almost all these are men selected by employers for physical soundness, and in many cases for intelligence besides. To these should be added certain artisans whose lives are unquestionably shortened by their occupation, such as lead workers. This second case is not to be applied with the same force as the other, however, as many weak and physically unfit are thereby put out of the race.

To a less degree these conditions apply to women engaged in factory, and other work. The first factor, death by accident, is not so frequent, but the second factor, deterioration of health in those who must be the mothers of the race is most serious.

It is hardly likely that these adverse conditions are powerful enough to be felt seriously for a long-time, yet they are present, and both demography and sanitary science must reckon with them.

Natural lives are never broken with impunity. Even abundant food, well ventilated houses, short hours of work and generally easy circumstances cannot neutralize a constant process of destroying the strong and preserving the weak. The individual cannot forever be set above the race without the race suffering.

One thing can be done, and when public opinion has reached the point now occupied by many physicians, will be done; surgery will be invoked to prevent the criminal, the epileptic, the insane, and the physically degenerate from reproducing their undesirable kind. As for the other side of the problem, saving the strong, new safety appliances will reduce the death rate to a minimum, precisely as train brakes and automatic couplers have lowered the mortality among trainmen.

DIET IN DIARRHEA IN CHILDREN.

We are in the midst of the season when we are called quite frequently to the bedside of children attacked with that much dreaded children's disease, diarrhea.

With variable conditions, hot or cool, with cool nights; when decaying fruit is abundant, when fermentation is apt to occur in eatables, and the child is ready to eat of what comes in sight, in spite of the watchful care of the parent, then this disease is sure to prevail. The mortality has always been high under these conditions until more rational measures were adopted

to tide the little patient over sufficient space of time until the alimentary track assumed a more normal condition.

In this disease above all others the proper management or control of the feeding is of the greatest importance, it, in fact, is the most essential part of the treatment, and has much to do with progress and termination of the case.

We cannot depend upon drugs in these conditions; they are of secondary importance.

The first duty when called to see a case of infantile diarrhoea, originating from whatever cause, is to withdraw all food of every form, and to continue that rest to the alimentary canal for at least twenty-four hours. As Holt in his book, "Infancy and Childhood," 1897, page 313, says: "For the first twenty-four hours no plan succeeds better than that of withholding everything in the shape of food, giving only such articles as whey. egg albumen water, or cold boiled water."

If called early in the case a most important and the proper thing to do, is to clear the alimentary canal- That is best done by a good dose of castor oil. The stomach may be siphoned with boiled water, the lower bowel washed by irrigation, but the more perfect clearing of the canal is by castor oil. Should the child vomit the oil, a second dose may be given at once and this will usually be retained.

Small doses of calomel, one-tenth to one-sixth grain, with one or two grains of bismuth sub. nit. or prepared chalk should now be commenced and given quite frequent, and continued until an effect is obtained.

If stimulants are needed, brandy or aromatic spirits of ammonia in suitable quantities may be allowed. Hot water by the teaspoonful may be given alternate with the egg water. Toast water also is serviceable as is barley water. Thos. S. Southworth, M.D., of New York City, in Medical News July 13, 1901, page 43, mentions in these cases "dextrinized barley water."

After the stomach has become quiet, and the motions more normal and less frequent, small quantities of beef juice may be given, as Wyeth's, Park, Davis & Co.'s, or Valentine's; any such that is fluid and palatable. Plain well boiled beef broth is as a rule acceptable if well seasoned. If the child is quite young, it may now go back to the mother's milk or carefully prepared, well diluted cow's milk, which latter may be peptonized. This is easily done by adding a portion of Fairchild's essence of pepsin just before each feeding.

In this way, carefully studying each case, and feeding, as it is able to digest food, the little patient is guided back to health.

The proper drugs to control the too frequent action of the bowels must be studied and carefully administered.

LIFE INSURANCE FOR YOUNG PHYSICIANS.

My dear young doctor, I see you smile and ask what has life insurance to do with medicine? Well, let us reason the matter over. There is more than one side to a medical man's career. There are at least two sides in his every-day affairs. One, foremost and above all else, is the relief of sickness and suffering, prolonging life. There is also a human business side to his calling. It becomes necessary that he be recompensed for the duty done. It is well recognized that few doctors become wealthy strictly by the practice of medicine. It is quite proper to be ambitious and popular, yet the financial side must be cared for; unless you realize your just dues from your labor, the expenses of the most popular practice cannot be met, unless you are well endowed financially for life, for the work before you begin; however, such is not the usual condition.

You will eventually be at the head of a family, at least should be, then you have reasons and responsibilities making it necessary, or at lest proper to look after your financial welfare, along with your devotion as a humanitarian.

Dr. W. Cathell, of Baltimore, Md., in his book, "The Physician Himself," says: "It is regarded by many unreasoning persons that ours is a path of ease, that we ride around during bank hours, prescribe for a few select patients, receive dollars by wholesale, and soon get rich, a very great mistake. The truth is, when a doctor dies his family is usually left poor and helpless, he has acquired money otherwise than by practice."

Besides, this life is uncertain, all doctors do not die of old age; and it becomes your duty and wish to leave some competence for those dear to you should you be taken away untimely. Hence comes the importance of our suggestion: After you have located, when practice begins to come to you and you are by careful economy able to lay by a little money, invest in a policy in some good reliable Life Insurance Company. You can make the payments as may be most convenient, this will teach you methods of economy, which is the "road to wealth" not for wealth's sake, but for the benefit of those dependent upon you. You should take out a policy maturing in a certain number of years, at the end of which time you can

have several optional methods or plan of settlement, one which will give you a paid up policy for the balance of your life will be the best. Take just such amount which you can conveniently pay for, not too high nor yet too low. By taking out insurance while you are yet young in years the rate will be less than later.

BOOK REVIEWS.

The Diagnostics of Internal Medicine. A Clinical Treatise upon the Recognised Principles of Medical Diagnosis. Prepared for the use of Students and Practitioners of Medicine. By Glentworth Reeve Butler, A.M., M.D. With Fine Colored Plates and Two Hundred and forty-six Illustrations and Charts in the Text, New York. D. Appleton & Co., 1901.

The author, in the preface, says that this work has been written from the point of view of practical clinical work. The physician meets primarily symptons and signs —the evidences of disease; subsequently it is decided that the symptoms found indicate the presence of a specific ailment. This volume, therefore, naturally divides itself into two parts: First, a study of symptoms and their indications; and second, a study of diseases and their characteristics. The work is based upon clinical experience and investigation, and contains numerous statistical tables, both original and quoted from other sources. It contains large numbers of good original illustrations. The first ten pages of this work is devoted to a synopsis of examinations. This section is complete, taking in every detail. How to examine every organ in the body. The next twelve pages is devoted to Diagnosis symptoms, Difficulties in Diagnosis and how to Obtain it, &c.

Next we come to the first grand division of the book. The Evidences of Disease. The author states this comprises (1) a brief consideration of the clinical anatomy and physiology of certain organs and systems; practical points of every day utility; (2) a description of the approved methods of the examination; (3) a careful consideration of the many signs and symptoms encountered in the practice of internal medicine; (4) a statement of the diagnostic significance of each sign and symptom.

Part II. Diagnosis, Direct and Differential, contains: (1) succinct descriptions of recognized diseases and their symptoms, with (2) special reference to the diagnosis, direct and differential, of each disease.

It is evident from the preceding that the book contains all that is essential for making a diagnosis. The type is clear, the paper white and binding good. The book approaches near the standard of the ideal diagnostic work, and appears to us to be the most up-to-date book upon this subject in the English language.

The Ready-Reference Hand-Book of Skin-Diseases. By George Thomas, M.D., Chief of Clinic and Instructor in Dermatology, College of Physicians and Surgeons, New York. New (4th) edition, thoroughly revised. In one 12mo, volume of 617 pages, with 82 engravings and three colored plates. Cloth, $2.75, net. Lea Brothers and Co., Philadelphia and New York. 1901.

Much progress has been made in the subject of skin disease within the past few years and this book has become very popular in so much that the third edition has been exhausted. This shows, too, the popularity of this book. In this volume the author has spared no pains to keep his work abreast of its subject. In this edition new sections have been added on Acne Keratosa, Acne Urticata, Carate, Craw-Craw, Endothelioma, Fordycis Disease of the Lips, Granuloma Necratica, Impetiego of Bockhardt, Lichen annularis, Lichen Pilaris, Pityriasis Lichenoides Chronica, and Verruga Peruana. The book is a clear, trustworthy and comprehensive text-book for the student, and convenient in the highest degree as a ready-reference for practitioner or specialist. The moderate price made possible by the large editions demanded is a point appreciated by every purchaser.

Progressive Medicine. Volume I, March, 1901. Edited by Hobart Amory Hare, M.D., and H. R. M. Landis, M.D. Philadelphia. Lea Brothers & Co., 1901.

This work has become familiar to numbers of physicians throughout the country and needs no general description. The first volume of the series of 1901 of this most excellent quarterly is full of good practical matter for the physician in his daily work. Its contributors are Dr. DaCosta, Dr. Packard, Dr. Crandall, Dr. Hektoen, Dr. Logan Turner (Edin) F. R. C. S. Edin and Dr. Randolph. The first section is devoted to Surgery of the Head, Neck and Chest, by DaCosta. No abler writer lives than DaCosta and the excellences of his writings here are fully maintained. The next section is by Dr. Packard. He has devoted much attention to the disease of typhoid fever. His article shows careful study and is highly commended.

The diseases of childhood has received special attention at the hands of Dr. Cran-

dall. This is a valuable section. One of the most important and instructive sections to be found in the work is that upon Pathology. Dr. Ludwig Hektoen is the author. Dr. Logan Turner Contributes the article upon Larangology, and Rhinology and the section on Otology is by Dr. Randolph.

The possessor of this work has all that is worth preserving of current literature in a convenient from for ready reference.

A Manual of Surgical Treatment. By W. Watson Cheyne, M.B., F. R. C. S., Professor of Surgery in King's College, London, Surgeon to King's College Hospital, etc., and F. F. Burghard, M.D., and M.S., (Lond.) F. R. C. S., Teacher of Practical Surgery in King's College, London, Surgeon to King's College Hospital, etc. In seven imperial octavo volumes, with illustrations. Volume V., 482 pages with 145 illustrations. Cloth, $5.00, net. Lea Brothers & Co., Philadelphia and New York, 1901.

We have long needed a work of this kind. The subjects of Diagnosis and Pathology have been elaborately and extensively considered by many writers, both very important subjects, but a full and detailed information as to the best methods of treatment, which is more essential, has not been so extensively discussed. This is a practical book, dealing with practical subjects in a practical way. The diseases which it treats are those which make up the greater part of the practice of every physician. Many operations which may well be performed by the general practitioner are described with that careful detail which characterizes the work. Thus among other matters we find attention devoted to Affections of the Scalp and Skull, Affections of the Face including Wounds, Inflammatory Affections, Ulcers, and New Growths, Fractures of the Nasal Bones, Affections of the Lips, Hare-lip, Cleft Palate, Fractures and Inflammatory Affections of the Jaws including Tumors, Congenital Affections and Injuries of the Larynx and Trachea, Foreign Bodies in the Air-passages, etc. In addition to the regular volume there is a practical section on the Intrinsic Affections of the Nose, Ear, and Larynx by Dr. H. Lambert Lack, Surgeon to the Golden Square Hospital for Diseases of the Throat.

Illustrations are used wherever they can assist to render the text more intelligible.

For the general practitioner, surgeon, or specialist, no more valuable work than this has ever been published. The authors, who by reason of their long experience and faithful study are entitled to the fullest trust give unreservedly of their knowledge, and moreover every phase of their subject is treated with such attention to detail and in terms so clear that if their instructions are followed the best results must be attained.

International Clinics. A Quarterly of Clinical Lectures and Specially Prepared Articles. Edited by Henry W. Cattell, A.M., M.D. Volume II. Eleventh Series. 1901. Philadelphia. J. B. Lippincott Co., 1901.

This is the second volume of the Eleventh Series of this publication. The authors of these lectures, or articles, are men of considerable reputation in all parts of the world and provide the physician with valuable information which perhaps he would not take the trouble to seek in the ordinary text-books. This volume opens with an article on the Treatment of Atony of the Stomach and Colon by Fenton B. Turck, M.D., in which he discusses the different methods and technique, such as gymnastics, combined with massage, in the treatment of these diseases. Dietetics are also considered. Other articles follow by T. H. Tuffier, on Surgical Analgesis by Injections of Cocaine into the spinal column, and one upon The Treatment of Malignant Tumors by an Anticellular Serum by Dr. Whalff.

The remaining articles in the volume deal with such subjects as The Conservative Treatment of Appendicitis, Croupous Pneumonia, Internal Hemorrhages, Mechanism of Mental Operations, Locomotor Ataxia, Inguinal Hernia, Abortions, Acute Dilatation of the Heart, External Occular Signs found in Unconsciousness, &c. The illustrations which are found in the volume are good and satisfactory. These volumes will be of unexceptional value to those physicians who cannot attend lectures from year to dear. The book from a mechanical standpoint compares with its predecessors.

The Diseases of the Respiratory Organs, Acute and Chronic. By William F. Waugh, A.M., M.D., Professor of Practice and Clinical Medicine, Illinois Medical College, etc. Pages 221. Price $1.00 net. G. P. Engelhard & Co., Chicago, 1901.

The old adage, the costliest goods do not come in the largest packages, well applies to these volumes. They appear small and unassuming, but within will be found the richest of material. The diseases of the respiratory organs are treated in a most satisfactory manner. The author thinks the treatment of acute affections of the respiratory organs has progressed far beyond that given in the text-books on Practice. The author bases his treatment upon the conception of the *role* played in acute inflammations by the vasomotor

nerves, and he believes that the future of scientific therapeutics lies in the study of such pathologic states, and the influence of drugs upon them, rather than in the consideration of these maladies as pathologic entities.

We like the book—we admire the author's idea of treatment and commend the little book accordingly. It is a neat red-back book, nicely printed on white paper.

Syphilis: its diagnosis and treatment.—By William S. Gottheil, M. D., Professor of Dermatology and Syphilology, New York School of Clinical Medicine; Dermatologist to the Lebanon and Beth-Israel Hospitals, the West-Side German Dispensary, etc. Profusely Illustrated. Pages 216. Price $1.00 net. G. P. Englehard & Company, Chicago, 1901.

This work contains 211 pages and contains a concise resume of the latest conclusions regarding the natural history of the disease, and the best methods of combating its manifestations. The author describes the various lesions in a very clear manner, and for elucidation often gives a cut—the illustrations are good, The mercury and iodides are remedies to depend upon.

The Illinois State Board of Health, Report of the Sanitary Investigations of the Illinois River and its Tributaries. Springfield, Ill. Phillip Bros. State Printers, 1901.

This volume contains much value matter pertaining to drainage, the pollution of water and matters of such characters. The Chicago water supply, sewerage system and main drainage clearance is given in full. The book contains 219 pages and is bound.

Transactions of the Michigan State Medical Society for the year 1901. Vol. XXIV. Detroit. Published by the Society.

This volume at the beginning contains a very good portrait of A. A. Alvord, M. D., President of the Michigan State Medical Society, and following this is a good biography of him. The papers read before this meeting are numerous and of a varied kind. They are well written upon interesting subjects. The discussions are excellent. Very few volumes compare with this one from a mechanical standpoint. A. P. Biddle is Recording Secretary.

Transactions of the Southern Surgical and Gynecological Association. Vol. XIII. Held at Atlanta Ga. Published by the Association. 1901.

These transactions are replete with good material. The minutes are well taken, the papers are carefully prepared and the discussions are interesting. These transactions always appear in handsome style; thanks and appreciation are always due Dr. W. E. B. Davis for his labors and care in getting them out so early and creditably.

Transactions of the Homepathic Medical Society of the State of New York for the year 1900. Volume XXXV. Edited by the Secretary, DeWitt G. Wilcox, M. D., Buffalo, New York.

These transactions form a very readable volume of 404 pages. The papers are newsy, well illustrated and carefully prepared. The proceedings are well reported and fully discussed. DeWitt G. Wilcox, M. D., is Secretary of the Society.

LITERARY NOTES.

The sale of thousands of copies of a ten cent magazine at one dollar apiece was a very curious happening at the time of the Chicago World's Fair. The Cosmopolitan prepared a World's Fair number, contributed to by many famous writers, and so thoroughly illustrated that it surpassed even the most expensive book which had up to that time been issued. In those days the magazine was printed from two sets of plates only, and when these were worn out it was impossible, witnout a great loss of time, to put further editions on the press. The newsdealers, taking advantage of this condition, raised the price of The Cosmopolitan's World's Fair number to one dollar a copy. A few sales were even made toward the close at the phenomenal figure of five dollars. Undoubtedly this happening is unique in the history of magazine literature. The Cosmopolitan will endeavor to repeat its past success, with a Pan-American Exposition Number, which will be even more attractive, if possible, than its World's Fair predecessor.

The most famous writers of the country have been invited to take part in the preparation of this issue. After many days' careful study of all the wonderful scenes of the Exposition more than a hundred photographs have been prepared, which, taken as a whole, give a thorough conception of the marvels of this Exposition.

It is doubtful if any book, selling at forty times the price of the magazine, will give any description of the Fair which will approach in interest and artistic value the September Cosmopolitan.

Those who visit the Fair will preserve this number as a delight reference-book in the years to come, and those who are una-

ble to go there will secure such a comprehensive view of its main attractions as will be well worthy of preservation.

The leading article in the September Forum deals with "The Commercial Position of the British Empire." Its author, Benjamin Taylor, urges that computations of Britssh trade should not be confined to the Britsh Isles, but should include the colonies also. Another fiscal article is that by Jacob Schoenhof on "The German Tariff Proposals," which he considers likely to inflict a more serious injury upon Germany than upon any other nation. Sir John G. Bourinot contributes a historical retrospect of previous "Royal Visits to Canada." President G. Stanley Hall outlines the programme of "The Ideal School as Based on Child Study," while F. W. Clark traces the record of "The Evolution of the American University." Karl Blind criticises "English Neglect of Old Indian Poetry." "Finland's Plight," by Eugene Limedorfer, is a strong indictment of the recent policy of Russia toward her weaker neighbor. Porf. Peter T. Austen relates a large number of illustrations of "The Utilization of Waste" in various scientific processes. "The Essay as Mood and Form" is the subject of a critical paper by Prof. Richard Burton. Other articles in the September number are "England, Portugal, and the South African Republics," by Lt. Gen. Den Beer Poortugael; "A Model Factory Town," by Leonora Beck Ellis; "Can Cubans Govern Cuba?" by Edmond Wood; and "The Southern Problem," by George A. Thacher.

Scribner's Magazine for September begins a notable series of three articles, to run through the fall numbers, giving in a condensed and graphic way the history of "The United States Army" as a fighting-machine, from Washington's assuming command at Cambridge to the capture of Aguinaldo. The announcement of Major-General Francis V. Greene as the author of these articles will particularly commend them to well-informed readers. General Greene by descent and by actual experience has the closest connection with the Regular Army. He is a collateral descendant of General Nathaniel Greene of Revolutionary fame and the son of General George S. Greene who distinguished himself in the Civil War, and he himself is a West Pointer, a distinguished writer on military subjects, and, as everybody will recall, received the surrender of Manila. What General Greene has written is not a history of wars, but a narrative of the organization and development of the army. It is peculiarly appropriate at this time, when the new army bill has just gone into effect, to recall the preceding stages of its development. The narrative, of course, includes pen pictures of great generals, and condensed and graphic descriptions of their campaigns.

In the August Review of Reviews Dr. Shaw discusses the great steel strike in its various aspects and comments on many other matters of current interest at home and abroad. M. de Bloch's recent address at Paris on the lessons of the Boer war is reviewed, and its application to the military situation in the United States, as well as in Europe, is pointed out.

In the September Review of Reviews Dr. Shaw touches on the Schley-Sampson controversy, and discusses the steel strike, the trobles in Panama, and many other foreign and domestic topics of current interest, including a valuable summary of some of the important European expositions of the past season.

The Living Age has done its readers a service by translating and printing in its issues for August 3 and 10, M. Ferdinand Brunetiere's clever and not unsympathetic observations on "The American Spirit," which were first printed in the Revue des Deux Mondes.

ABSTRACTS of One Hundred of the Leading Articles of the Month.

A Study of Burns, with a Plea for their More Rational Treatment.

Burns and scalds are the commonest injuries of the body and Holmes ranks them as the most commonly fatal. An excellent summary of this subject is given by Frederick Griffith in The Medical News:

Burns are the commonest of injuries and of all wounds they are treated least in accordance with now universally taught and accepted surgical principles.

Burns may be divided into two degrees of severety; burns of the first degree involve the skin only, those of the second degree include all others.

The pathology of burns is the pathology of inflammation of the part locally affected with almost all the morbid changes possible in the complications which result.

Early death and internal complications

after burns are due to direct action of heat, with fragmentation and vital change in the blood-corpuscles; later effects are due to infection taking place from the burned area.

The condition of the granulations during the healing of burns is the determining factor in the amount of contraction and subsequent deformity which takes place. The greater the friction caused by irritation from whatever source, the larger will be the granulations, the greater the amount of connective tissue and the greater will be the contraction.

The local treatment of burns from the earliest times has been along the lines of prevention of irritation, but the late advances made in wound treatment have not been followed out in these.

The burn wound should be cleansed of as much dead, burned tissues as possible; the thoroughness with which this clearing away of the eschar is done will determine in a great measure the amount of future discharge, and the presence or absence of infecting organisms.

Hydrogen di-oxide to wash away the debris and render aseptic the denuded parts is the best antiseptic at our command; rubber tissue in strips should be laid on the wound to prevent contact with the absorbent dressing.

The use of splints to secure relaxation and retention in obtaining rest for a burned part is of great importance and is as much indicated in this form of inquiry as in fractures of the contiguous bones.

The internal treatment of burns is stimulating until reaction from shock has taken place when it becomes supportive.

Opium fulfils the indications for pain, internal inflammations and diarrhœa.

The bowels and kidneys must be continuously kept open but enemas should be employed.

Watchful attention must be paid for early signs of internal complications of the viscra.

Acute Dilatation of the Stomach.

Much attention has been paid to chronic dilatation, while little has been said concerning the acute form, which is probaly due to the fact that it occurs with much less frequency. There are certain symptoms characteristic of this trouble says Julin Friedenwald in American Medicine:

There are the sudden and rapid distension of the stomach, the pain and the absence of peristaltic movements, the absence of vomiting and diarrhea in the early stage of the disease, followed by intense and constant vomiting of very large quantities of geenish fluid, accompanied by great exhaustion. It is probable, as Boas points out, that acute dilation of the stomach does not occur more frequently, inasmuch as in most cases of acute indigestion, vomiting and diarrhea come on at once, and thus the fermented material is quickly gotten rid of; while in cases of acute dilation, vomiting and diarrhea are only late manifestations. It is therefore well to remember the possibility ot the occurence of acute dilation in all cases of acute dyspepsia, and thus to empty the stomach quickly, either by means of some brisk emetic or by means of the stomach tube, so as to avoid the accumulation of fermented material, which is apt to give rise to a sudden and perhaps a permanent distention of the stomach.

Acute Peritontis; Its Treatment Upon an Etiological Basis.

In our student days we learned that the peritoneum is an immense serous membrane lining the walls of the abdomen, covering and protecting the organs therein. A most beautiful pen picture of a form of present treatment of peritonitis in comparison with that of former days is given by C. D. Hill, in the Medical News. He says:

I can see at no distant day a picture which I will label "Hope Astride Science." In this picture I see a patient on the operating table, and, although his peritoneum has been invaded by hordes of bacteria, still he has a hopeful expression on his face, confident is he in the science and skill of the medical men around him. There are five of these men of science, all arrayed in spotless gowns, all working in harmony and with clock-like precision. First is the elctro-therapeutist, who turns on the X-rays and marks out the infected area; second, is the spinal anesthetist, who dulls the patient's pain, but not his senses: the third is the family physician, who still looks out for the general welfare of his patient; the fourth is the surgeon, who opens the abdomen, and, while he performs the peritoneal toilet and places the drains' the last man of science, the pathologist, takes his specimen of poison, places it under the microscope, names the germ and applies the proper antitoxin.

Take another picture, drawn from the past; it is called "Despair Lashed to Conservatism." In this picture I see great crowds of young men and women and children and the aged, of all colors, nationalities, and walks of life, but all with the same Hippocratic expression suffused over the whole face except the eyes' which have that ecstatic look given by the poppy; each

presses one hand over the right iliac region, and in the other holds aloft a scroll, and on every scroll I see this couplet, printed in red letters:

Peritonitis! the Doctors cried;
Opium, the Doctors plied.

A Report of 212 Cases of Ventro-Suspension of the Uterus.

There is no condition in gynecology which is of more interest to the general practitioner and specialist alike than chronic retro-displacement of the uterus. In a paper by Richard F. Woods in American Medicine, the following conclusions are drawn in regard to this subject:

That the course of subsequent pregnancies and labors do not seem to be impeded by this operation.

That the operation in the great majority of cases carefully selected gives excellent results, and the relief experienced is lasting.

That it restores the normal condition of the uterus, and does not substitute a fixed unnatural anteflexion.

That the risk is minimum, and the danger from hernia very slight.

That by including a small amount of muscular tissue we increase the strength of the ligament without risk to patient.

Anesthetics in Heart Disease.

After reviewing the possibility of accidents occurring during or after anesthesia from chlofoform, ether, etc., Finney in the Journal of the American Medical Association, finds that as regards ether, the contra-indications are rather respiratory than cardiac, while chloroform is more dangerous in all cases of weak heart. From a study of 142 cases, he thinks that in myocardial conditions only do anesthetics exert any markedly bad effects. In valvular disease their influence is very slight, though appreciable, and in functional diseases insignificant. He emphasizes the importance of the part taken by the anesthetizer, which is in some cases more important than that of the operator himself, and a need of a thoroughly competent corps of anesthetists in our hospitals.

Absorption of Various Drugs by the Bladder.

Barbiani (Therapeutic Gazette) has found by experimental research that dilute solutions of various drugs, with the exception of iodine, are never absorbed by the bladder at the first irrigation, but that if consecutive irrigations are made there is a fairly active absorption. This he attributes to certain functional disturbances of the epithelium incident to the mechanical action of the lavage upon the vesical walls, since such absorption may take place without further alteration of this epithelium. He believes that the complete retention of urine is itself sufficient to produce such changes in the vesical mucosa as are calculated to encourage absorption.

Ataxia.

Lenaz, in the Philadelphia Medical Journal, calls attention particularly to certain facts in the ataxic gait.

First, the flexion at the knee is not controlled in such a manner as to produce the greatest economy of energy. When the leg has reached its maximum height in the step, the flexion of the knee continues, and therefore at the end of the step the foot is abnormally high and falls strongly upon the ground. He therefore looks upon ataxia as a loss of the synergetic influence of the various joints. Against theory that ataxia is produced by interference with the centripetal tracts is the fact that in many cases it may exist without any disturbance of this nature. Lenaz believes that even although the patient should feel perfectly well what degree of intervention he should impart to his muscles, it would be impossible to carry out coordinated motions unless each detail of the movement were perfect. He therefore concludes that there are probably 2 systems concerned in movement. First, that of the cerebrum which consists of the sensory fibres to the brain, and the motor fibres from the central region. Second, the cerebellar system which supplies the involuntary and unconscious but nevertheless, indispensable synergies. Disease of the cerebral system causes in general paralysis, of the cerebellar system ataxia.

Cardiac Reflex in the Diagnosis and Treatment of Dilatation.

It has been well known that a high degree of external friction over any organ which has a permanent or occasional approximation to the thoracic or abdominal parietes produces a reflex contraction of the underlying viscus. In a readable article in the Hammermanian Monthly Ch. Gatchell of Chicago, attempts to establish these propositions that:

(a) A cardiac reflex does exist;

(b) The absence of the cardiac reflex in any given case is diagnostic of extreme pericardial effusion, and precludes dilatation;

(c) The repeated induction of the cardiac reflex, in dilatation, is followed by an improved state of nutrition in the heart-muscle;

(d) Digitalis, when administered long enough to become cumulative in its action, lowers the nutritional plane in the heart's metabolism.

Cholera Infantum.

J. C. Johnson, Alabama Medical Journal, says:

The season most favorable for the development of this disease is in the summer months. It is generally concluded that heat and improper aliment are the factors necessary to the production of the disease, and the microbe does the rest. Prophylaxis in this disease, as in all others, is the best treatment.

If we could educate the mothers to exercise an intelligent care over her infants we would sign less certificates of death due to cholera infantum. We should educate the mother to avoid the weaning of her child during the summer months, if possible. Should the child be weaned or artificially fed, that diet should be adopted which mostly resembles the mother's milk; and in the writer's opinion cow's milk is the best available substitute for the mother's milk.

Cancer, Particularly Cutaneous Cancer.

The term cancer is one which at various times has been applied to almost every malignant growth, and which, even today, is differently understood by different observers; but the tendency is becoming more marked to restrict its use to those anomalus growth which are malignant and which originates from epithlial cells. Ellice M. Alger discussing this subject in the New York Medical Journal says:

The treatment of cancer of the skin requires great good judgment. No internal medication has so far proved of any value, nor is there any promise of such medication. To operate or not to operate, that is the question. In many cases, whether because of the extent or location of the disease or because of the condition of the patient, operation is not to be thought of. It must be borne in mind that a partial operation may frequently be worse for the patient than non-interference. Superficial epitheliomata and those occurring in the very old, are much less in need of active interference, for both are commonly very indolent. On the other hand, growths in the vicinity of active lymphatics should be removed at the earliest possible moment. Removal of tissue for examination is a dangerous procedure, for there are many cases on record where, in this as in actual operation itself, cancer cells have been disseminated through previously healthy tissues. Instruments that have been in contact with cancerous tissues are a constant source of danger to the healthy tissues of that individual, till they have been disinfected, This same danger makes the operation under infiltration anæsthesia objectionable. In those epitheliomata in which lymphatic involvement has not yet taken place or is not to be dreaded, removal by some caustic will often be consented to by a patient who would refuse an operation, and the results ought to be equally good. Arsenic, which has a selective affinity for cancer cells, is to be preferred to chloride of zinc or caustic potash, which cause destruction of diseased and healthy tissues alike. In the caustic treatment, as in others, thoroughness is the main thing, and superficial caustics, like carbolic acid and nitrate of silver, often do more harm than good. Arsenic, whether used as a paste or a solution, causes a necrosis of cancerous tissue, and by the inflammatory action excited destroys the low vitality of cancer cells far beyond the range of its actual application and, in this way, reaches outlying cells which would not be included in an operation by the knife. The resulting wound is a foul one to the eye, but more likely to yield a good result than though it were aseptic. It rapidily fills in with granulation tissue and often gives a surprisingly good cosmetic result. The great drawback about the method is that it has no certain action when the lymphatic are involved. When the lymphatics are actually involved, the knife is the only resort giving any reasonable promise of success. In well-marked cancer where dissemination is taking place, amputation will often in the end prove the most conservative policy; the glands should be dissected out as thoroughly as possible and the danger always be borne in mind of infecting a healthy wound during the process of the operation itself. The inoperable cases must be treated palliatively according to their individual needs, dressed with antiseptics and deodorants, and if painful the leisons must be sprinkled with some analgetic which gives long-continued relief.

Circumcision.

Bluhm in Journal American Medical Association considers circumcision unnecessary from the hygienc, and useless from the preventive standpoint. Physiologicall it is the removal of a functionally useful part and mutilation of an organ. From the pathological standpoint it is unjustified; from the humanitarian point of view, it is cruel and ought to be prohibited by law.

The Cost of Sickness.

Sickness is very expensive. It costs far more than health, and the returns from it are not large. Vice only is more costly than ill health. The direct cost is almost incalculable. I. J. Lausing, in Health Culture, says reflection upon these plain facts cannot but make it apparent to every person that health is valuable in economic ways. Many a career has become pitiful only because the person has broken down in health. A vigorous physical habit as a resource of a right heart and a sound mind is one of the pillars of fortune. Health for happiness and for service is so good and so great that he who possesses it may be said truly to be endowed and armed for triumph. We wonder, then, that so few are willing to give the body that care which will make it the agent of all the higher powers for the accomplishment of the largest success of life. It is worth the care.

This they often feel who are struggling back to the health which they have carelessly lost, and this they know who have the unspeakable delights which are the accompaniment of good health.

Dysentery in the Philippines.

The following considerations are submitted by M. H. Bowman, in the New York Medical Journal concerning Dysentery:

The quality of dysentery is proved.

Acute dysentery is the result of infection with the bacillus of Shiga.

It is infectious in the same way that the bacillus of typhoid fever is infectious.

Amœbic dysentery is caused by an amœba.

There are both a pathogenic and a non-pathogenic amœba, which fact has produced much confusion regarding the amœbæ as an ætiological factor.

The lesions of amœbic dysentery differ from those produced by the bacillus of Shiga.

The therapeutic agents generally used for the treatment of acute dysentery are in no way curative.

Magnesium sulphate should be included in this list.

Quinine solution is a specific for the amœbic dysentery, but its employment in rapid, acute, ulcerating cases is fraught with danger and from the nature of the lesions it can not be retained for a sufficient length of time to produce beneficial effects.

Diagnosis and Prognosis of Heart Disease.

The diagnosis of a cardiac lesion, says M. H. Fussell, in the Philadelphia Medical Journal, must be based upon the size of the heart—upon its rhythm—upon the character of the first sound, in some cases upon the presence or absence of a murmur. A heart may be much damaged and give no murmur. An extremely loud murmur may be present and the heart be fully competent.

The Condition of the Kidneys with Reference to the Enlargement of Diuretics.

It may be said that diuretics are of little if any avail in removing inflammatory effusions or procuring absorption of chronic effusions, such as ascites and hyurotherax. Arthur R. Elliott, writing in the Medical News, concludes an excellent article in the following words:

1. Except in the case of the irritant epithelial diuretics (turpentine, cantharides, etc.) the entire class of diuretics may be said to exert their effect upon the urine by acting indirectly through the circulation.

2. Owing to the necessity for sparing the kidneys all irritation, drugs given for diuretic purposes should act indirectly rather than directly, consequently the secretory diurectics are contra-indicated in irritative and inflammatory renal conditions.

3. In functional urinary disorders diuretics are mainly useful to overcome concentration and hyperacidity of the urine. To accomplish this, simple diluents and salines are best adapted.

4. In acute nephritis saline diuretics are permissible throughout the entire course of the disease and exert a beneficial influence by increasing elimination and clearing the tubules of inflammatory debris. Subcutaneous saline infusion constitutes our most powerful eliminant in desperate cases.

5. In chronic nephritis the cardio-vascular diuretics are most useful, owing to the fact that oliguria and dropsy are usually the result of circulatory failure. The dropsy under such circumstances, being of cardiac origin, may be benefited by cardio-vascular stimulants provided the kidneys are not too badly damaged.

6. Dropsy of purely renal origin is not amenable to favorable influence by diuretics.

7. Although the morbid process in the kidneys may furnish us with our primary inspiration to diuretic medication, it is the condition of the heart and circulatory apparatus in most cases that determines the choice of an agent.

Go to the Society if you can. If you cannot, send your money and help to keep alive the mother that gave you your professional birth.

The Diagnosis of Typhoid Fever in the Laboratory.

Laboratory and clinical methods of diagnosis should not be separated says John Lovett Morse in Journal American Medical Association. Both are important and both fallible. Neither is complete without the other. Laboratory methods must be used with due recognition of their value and of their limitations. Otherwise they may lead to erroneous conclusions. The Widal reaction and the leucocyte count are the most useful of the laboratory tests for the diagnosis of typhoid fever. They are easily carried out and within reach of all. Certain other methods are of equal or even greater value but are impracticable for everyday use.

Different Forms of Sleeplessness.

The most common disorder of sleep, writes Chas. A. Dana, in Indian Record, is insomina, but this is only a very general term, for there are many kinds and degrees of sleeplessness.

The approach of sleep may be accompanied with a strain and stress which are very uncomfortable; during sleep there may be an unnatural activity of the sensory and association centres causing dreams, or of the motor centres causing shocks, starts, and spasmodic symptoms. Ordinary control of the visceral centres may be lessened, causing discharges from the bladder, sexual organs and intestines; or the vagus may let go its hold and the patient be wakened by palpitations and dyspnœa. The sensory centres may be stirred up, causing the patient to waken with sensations of light, colored scotomata, thundering noises, violent vertigo, or terrific pain. In fine, the ordinary smooth current of the subconscious activities breaks against some pathological condition, and now one symptoms, now another, is thrust out, and so unpleasantly disturbs the sleep and wakens the sleeper.

Examination of the Blood.

Five things are essential, says W. D. Kelly, in Journal American Medical Association, in order to make satisfactory examination of the blood.

1. The apparatus must be absolutely clean. 2. The various stages in the process must be performed rapidly, because the cell coagulation of the blood will interfere with any of the tests. 3. The work must be done accurately. 4. Making large quantities of stain and keeping some in glass-stoppered bottle will standardize the solution, so one will receive minimum variations in intensity of stain. 5. Fixing of specimen, by continous heat, with as slight a degree of variations in distribution of heat as possible; taking of blood specimens with reference to time of day.

Constipation in Infants.

There are few measures of more importance in securing perfect health of the infant than regular evacuation of the bowels. Colic, indigestion, intestinal irritation, fever, restlessness, sleeplessness, and even convulsions may result from too long a delay of this most important function. Chas. R. Sowder in the Medical and Surgical Monitor, says:

In infants under one year of age, constipation is usually due to lack of proper proportion of fats and proteids. In the treatment of constipation, we desire to cure, hence we should remove the cause by adopting proper dietetic measures. Drugs, suppositories and enemata are only temporary measures and their promiscuous and continued use should be condemned.

Digitalis.

Ingram in Journal American Medical Association finds digitalis among the most valuable drugs for certain cardiac irregularities not due to indigestion, which is aggravated by the use of this drug. The functional difficulties met with in neurotic may be, but not always benefited, and overstrain from exertion without demonstrable lesion is often much relieved. The dilatation of the right heart accompanied by cardiac disease may be, but is usually not much improved by the drug. Mitral insufficiency is one of the diseases in which it is most useful, but the more it varies from the edematous type, the less good will digitalis do. Cases where there is much pain and depression and but little regurigitation are not often benefited, though many are improved. Sometimes vomiting caused by digitalis prohibits its use. In mitral stenosis it is of great advantage to prolong the diastole and in this way digitalis helps; both stenosis and insufficiency of the tricuspid valves may be benefited in the same way as in the mitral valve, but in most cases it does less good in diseases of the right side of the heart. Aortic insufficiently is a condition in which digitalis is often harmful. It should be given only when the heart is very rapid or there is evidence that there is not much regurgitation or where there are other reasons, such as coincident presence of aortic obstruction, for wishing to strengthen and regulate the contraction. The dose should be small and the effects carefully watched. Sometimes in aortic stenosis it may be advisable to increase the force of

the beat, but most cases do not require drugs, for the cardiac hypertrophy itself is sufficient.

Empyema.

J. A. Hartwell, in Medicine, reports his observation on 52 cases of empyema. He thus summarizes his observations:

1. Children are especially liable to empyema following pneumonia. Unless promptly relieved by drainage of pleura the prognosis is bad. With such relief the prognosis is good.

2. Pneumonia caused empyema in 50 per cent. of the cases here considered, and such cases were of severe type.

3. Tuberculous family history exerts little influence on empyema.

4. In about one-sixth of the cases the empyema was sacculated.

5. The pneumococcus was found in 50 per cent. of the cases where examination was made; the streptococcus in 33⅓ per cent.; the staphylococcus in 8 per cent.; the tubercle bacillus in 4 per cent., and no bacterium in 16 per cent. The pneumococcus produced the most virulent infection.

6. Chloroform was the anesthetic of preference. Deep narcosis is contra-indicated, owing to the danger of pus being drawn into the other lung from a ruptured bronchus.

7. In adults with general empyema two inches of the seventh and eighth or eighth and ninth ribs in the posterior axillary line should be resected. In children the same length of the seventh rib. Simple incision, with our present knowledge, is rarely advisable.

8. Operation is indicated as soon as diagnosis is made.

9. Irrigation of the abscess cavity with bichloride solution, 1–5000, or carbolic acid, 1–100, is indicated, unless drainage is perfect and no sepsis is present. In children the solutions may be weaker.

10. The mortality from the empyema proper was 15 per cent. We may hope to reduce it to one-half that number by earlier and more radical treatment.

Epithelioma of Penis.

In the University of Pennsylvania Medical Bulletin, F. D. Patterson concludes an article upon this subject as follows:

1. That epithelioma is by far the most frequent form of carcinoma of the penis, and that its frequency is about 2 per cent. of all cancers.

2. That phimosis is a strong predisposing factor by causing chronic irritation.

3. That, as a rule, epithelioma is more frequent after middle life, though, like every other rule, this has its exceptions.

4. That the syphilitic virus has absolutely nothing to do with epithelioma, the scar of the old specific lesion being nothing more than an area of decreased resistance or a cause of chronic irritation.

5. That traumatism is a predisposing factor by causing an area of decreased resistance.

6. That the question of the contagiousness of epithelioma is still to be decided.

7. That epithelioma more commonly begins in the glans or prepuce, and that origin in the urethra is very rare.

8. That visceral metastasis is very rare.

9. That the prognosis in the precancerous stage is favorable if radical treatment be at once instituted; later it is only guardedly so.

10. That the only safe treatment in any stage consists in the thorough eradication of the area of disease and of all lymphatic glands that are involved.

Expectant Treatment.

The main idea in the treatment of disease is to benefit, relieve, to cure. That well known writer A. Jacobi, writing in American Medicine, says that the platform of every physician should be:

In order to obtain indications for treatment, make a diagnosis. That art is becoming both more accessible and, through honest and hard work, more easy with the aid of modern methods.

Remember that most diseases have, indeed, a tendency to spontaneous recovery, but also that recovery is not always complete and that invalidism should not be invited through neglect of treatment.

Complications are possible as long as an illness lasts, and with every day cut short, the dangers of an otherwise typical disease are diminished.

The experience of old men in the profession who claim they employ less drugs with advancing years, means sametimes either an inability to master new methods of diagnosis, or the knowledge of new medicines of physical remedies.

There is no one treatment for a disease adapted to every patient. There is no such thing as a uniform treatment for pneumonia, or for typhoid fever, or, even in spite of antitoxins, for diphtheria or tetanus.

We should not try to treat the name of an illness, but the patient.

"When I began taking your wonderful medicine I could not spank the baby. Now after taking seven bottles I can thrash my husband. God bless you."—Smart Set.

Elimination of Peritrneal Infection and Prevention of Surgical Peritonitis.

John G. Clark in quite a lengthy and carefully prepared article in the Journal of the American Medical Association, concludes as follows:

The peritoneum has an enormous absorbing function, being capable of taking up 3 to 8 per cent. of the entire body weight in an hour.

Minute solid particles are caried in an incredibly short time from the peritoneal cavity through the diaphragm into the mediastinal lymph vessels and glands, and thence into the blood circulation, by which they are quickly distributed to the abdominal organs and to the bone marrow.

The grandular bodies, are at first largely transported as free bodies, swept along by the lymph currents, but later the leucocytes act as carriers.

There is, normally, a force in the peritoneal cavity which carries fluids and foriegn particles toward the diaphragm, regardless of posture, although gravity may greatly favor or retard the current.

After the introduction of micro-organism into the peritoneal cavity, there is great decrease in their number within the first hour, both through their intraperitoneal destruction and through their rapid absorption into the general system where they are dealt with. There is, therefore, no possibility of limiting free infectious matter to any part of the peritoneal cavity by mechanical means.

Vigorous streptococci which remain behind, develop, within six hours, a repellent or destructive quality for leucocytes, and the lethal combat is, therefore, inaugurated and well under way before drainage, as ordinarily employed, can possibly exercise any beneficial action. In many cases, therefore, in which surgical drainage is employed, the patient recovers in spite of and not because of it.

A moderate amount of even virulent organisms, carried by the blood to the lungs, liver, spleen, kidneys, gastro-intestinal tract and bone marrow, may be destroyed or eliminated without the least harm to the patient, whereas, if the same amount of infectious matter is detained about a surgical field in the abdominal cavity, or stagnates in a dependent pocket, they may generate myriads of others, and thus overwhelm the patient.

In many cases, therefore, drainage, as ordinarily employed, is superflous, or even dangerous, and the rational method is to remove all possible debris and infectious matter by thorough irrigation and then leave one liter of salt solution—0.6 per cent —in the abdominal cavity, and in order to promote and hasten natural drainage, supplement this by an enema of a liter of salt solution, given while the patient is well under anesthesia and in the Trendelenburg posture.

Under this plan the patient is greatly stimulated, shock is minimized or averted, the urinary excretion is greatly increased, and thus toxic matters are more easily eliminated without irritation to the kidneys or bladder, peritoneal infection is quickly eliminated while yet minimum in amount, thirst is alleviated or entirely prevented, intestinal peristalsis is promoted, and consequently tympanites is of less frequent occurrence, and the early action of the intestines evacuates infectious matter thrown out into this canal by the blood-vessels of the villi.

All of these factors combine to reduce mortality after abdominal sections, to decrease pain, discomforts and complications of the first forty-eight hours, and finally to hasten the recovery of the patient.

Fusel-Oil Poisoning.

Fusel-oil, the commercial name for primary amyl alcohol obtained from femented grain or potatoes by continuing the process of distillation after the ordinary spirit has ceased to distill over. From the study of the effects of the administration of fusel-oil to dogs, and from the observations of two cases of fusel-oil poisoning, Thos. B. Futcher in American Medicine draws the following conclusions:

Fusel-oil, when administered to animals, causes the elimination in the urine of comqined glycuronic acid which reduces alkaline, copper and bismuth solutions and acts as a levorotation to polarized rays.

When taken by men it acts as a profound intoxicant, causing unconsciousness of several hours' duration.

In 1 of the cases it was followed by symptoms of hemiplegia.

In certain cases, as in Case 1, fusel-oil is a profound blood destroyer and causes methemoglobinuria.

In both cases it caused transitory nephritis.

In both patients a glycosuria lasting 2 or 3 days was produced.

In the 2 cases there was fairly conclusive evidence that combined glycuronic acid was present in addition to glucose.

Hay Fever.

In the treatment of this affection, Carroll Eugene Cook in the Western Medical Review gives some good advice when he says:

The most important remedy to me to use internally which seems to have the most specific action in the cases in which I have tried it in the past year, one that is rather new in therapeutics, but its use is established beyond question, is the dried suprarenal gland. It has seemed to me to act specifically on the symptoms of hay fever. I have, with but one exception, never used it without giving my patient the benefit of all the relief that could be had from local treatment. In some way it marveously contracts the vasomotor vessels of the nose. There is a marked reduction in the size of the turbinated bodies, lessening of irritation, almost cessation of coryza and sneezing and improvement can be noticed in a comparatively short time; and under its use the patient remains in comparative comfort through the remainder of the attack. A great advantage in the use of the gland is, it leaves no bad after-effects. The physiological chemist tells us it is useless to administer suprarenal gland internally, because in his opinion the action of physiological elements of the gland is disintegrated and destroyed by gastric juice. But you that have used it in the treatment of your hay fever patients do not find his theory borne out, because your patients are helped when used not only internally but locally applied. One has but to see the effects of suprarenal gland to believe the chemist may be wrong in his deductions. If 5 grains of the saccharated extract be given every hour, distinct local effects can be observed on nasal tissue. The engorged membrane begins to diminish in size, the circulation is restored, the headache will disappear; the hypersensitiveness of nerves will be diminished, and sneezing, which is so troublesome, disappear and the nose become a useful organ. It produces its effect both systematically and locally; it controls symptoms for a convenient length of time without too frequent dosage; it has no dangerous sesquelæ or toxic action. When given in full doses, the effect can be recognized by patient—some vertigo, some excitement, and increased heart action. I would not have used this remedy to the exclusion of all others only to emphasize its value. Its best results will be found in simple cases where symptoms are nasal, and pharyngeal inflammation with conjunctival involvement. Asthmatic tendency is certainly diminished by its use. In cases with prominent nasal symptoms the benefit is most marked. Cases are not helped where there is a loss of blood vessel elasticity due to atheroma. In hay fever subjects having neuroses combined with nasal lesions, in neurasthenic subjects having vasomotor disturbances, the best results are obtained. The drug can be used internally and locally. Internally I give it in capsules containing 5 grains, locally I commonly employ a 10 per cent. solution. It must be made often as it decomposes readily. In conclusion, I may say that no other remedy in my hands has given me such universally good results. It fulfills all indications better than anything I have ever used. Its effect on hay fever is certainly very satisfactory when used with or without other treatment. I can safely say it is the most useful and helpful remedy I have ever used in the treatment of this troublesome disease.

Hot Air as a Therapeutic Agent.

Orrin S. Wightman, in the New York Medical Journal, says that:

Dry heat is a valuable pain-reliever without any of the depressent effects common to drugs.

In connection with constitutional and medicinal treatment, we have in it a positive curative agent.

It is a stimulant to rapid repair and absorption.

It is one of the most valuable eliminative agents we possess.

Where indicated, it possesses a sedative action on the nervous system obtained by no other means.

The Importance of a More General Study of Diseases of the Nervous System.

Wharton Sinkler writing in the Philadelphia Medical Journal upon the general program made in the treatment of nervous diseases says that perhaps the greatest advance which has been made in the treatment of epilepsy has been in the general care which has been bestowed upon the unfortunate class who suffer from this disease. An effort has been made to take from the almshouses and insane asylums the indigent epileptics who have been sent to these institutions as the only resource, and colonizing them in farms and rural districts. Special institutions for the care of epileptics have been established within recent years in Europe and in different parts of this country. The first attempt at anything like establishing an institution for the special care of epileptics was made as long ago as 1773, by the Bishop of Wurzburg, Germany, by providing a home in connection with the Julius Hospital; and in 1845 a separate building was erected for forty-eight patients. The most important step in the direction of a colony for epileptics, however was taken at Laforce, France, in 1848, when John Bost, a clergyman, with the aid of his parishioners, opened a

cottage for the accommodation of fifty homeless epilptic girls. The growth of the institution has been quite remarkable. In 1862 another cottage was opened for boys, and additional cottages have been added, until now there is a large village entirely occupied by epileptics. In 1867 the celebrated colony of Bethel, near Bielefeld, was founded by another minister, Pastor von Bodelschwingth. The development of this colony has been extraordinary. The number of patients there in 1897 was 1441. There were 663 women, 550 men and 228 children under fifteen years of age. During the year 1897, 250 patients were received and 199 were discharged. The entire number of patients received in the colony since its establishment until January 1, 1898, was 5028. Of these, 388 or 77-10% were discharged as cured; 1099 or 21% improved; 1058 as not cured and 991 or 19 1-10% died.

The Importance of an Early and Radical Climatic Change in the Cure Pulmonary Tuberculosis.

The advantage of climatic change to those invalids suffering from phthisis has, as we all know, been observed for many years, but the actual study of climatology in its relation to tuberculosis has been a comparatively recent matter. In regard to the treatment of tuberculosis invalids, C. F. Gardiner is of the opinion, (New York Medical Journal), it is as well for us to remember that there has been an evolution in the west as well as in the east, regarding the use of pure air and wholesome food in treating consumption, while in the use of pure air we have had the advantage, as quality as well as quantity should be considered. Outdoor air is not of the same quality in all climates, and does not, therefore, exert a climatic effect to the same degree taken in the same quanity. Few will doubt the difference between the air of parts of Central America and that of New York city, or we will say within twenty miles of it, but few people, even climatologists, realise that there is as marked a difference between the air of New York and vicinity and that of Colorado and New Mexico. The air of our high dry regions, such as our altitude in Colorado, has a special quality not yet recognized in a strictly scientific way. It is not alone dry, but it is air that has a special quality, due to its having been purified by the rays of the sun over vast areas absolutely uncontaminated. It is not alone the effect of such air, when breathed by the consumptive, upon tuberculous processes in the lungs, but also its evident power of arresting septic process, that is so marked a feature in the prognosis of every case of continual pulmonary tuberculosis that makes such climatically selected air of more value as a curative agent than that of less favored regions. In my experience, a patient will derive as much benefit from four hours spent in the dry, sunny air of Colorado as from eight hours spent in the damp and cloudy climate of some parts of the east. In a dry climate, patients can be kept day and night, summer and winter, out of doors, with benefit and without risk. And it this possibility of keeping patients out of doors day and night, summer and winter, that to my mind offers such decided advantages for the cure of the tuberculous. I have during the past winter, had patients in tents and on piazzas, in the open air all the time; with proper precautions, with stoves or electric heaters and suitable clothing, there is no risk and much benefit.

Infantile Typhoid Fever.

There still exists much differences of opinion as to the best method of treating infantile fever. A very unique plan of treating this disease is given by August Adrian Strasser in Record. There can be no quarreling, he says with the stetement that the use of a combination of a modified Brandt method and a modified Woodbridge or Thistle method is the ideal form of treatment. No one who has had any experience with the use of the cold bath, cold packs, or alcohol sponge baths will deny that the effect of them is unique. The temperature can be lowered almost at will; nervous symptoms disappear; lungs and heart act freely and are braced, for it is a tonic, and I have seen adults and youths anxiously begging for another bath when they began to feel uncomfortable. In children the terrors of a full bath can be much mitigated by the use of the cold trunk pack frequently and rapidly changed. And likewise a glance at the pathology shows us that in a modified method of intestinal antisepsis we have another means of combating other symptoms; we can control the toxæmia, guard against perforations, aid the stomatitis and to a slight extent provide a prophylactic for the attendants. In fact, I agree with Yeo when he says "the practitioner who, in the face of the evidence that has recntly accumulated, neglects to take measures to promote intestinal antisepsis in typhoid incurs a very grave responsibility."

Acting upon these principles, this is one method of treating typhoid fever. The prime requisite, of course, is an intelligent nurse, and though I am well aware that typhoid is a self limited disease, I am also

equally certain that if an early diagnosis can be made so much more chance is there of aborting it or at least so modifying it that instead of running the usual four to six weeks' course, it can be cured in two to two and one-half weeks, and true Eberth's baccillus typhoid too.

So then, with an inteligent nurse and a clinical thermometer, when the temperature reaches 102.5 deg. or 103 deg. when there is great nervous irritability threatening convulsions; when there is severe headache, then is the time for the cold bath or pack. For the latter do not use wool or flannel; use muslin or linen lightly wrung out of water at 60 deg. to 50 deg. and quickly slung around the trunk from armpits to thighs and then wrap child up in a blanket; and doing this every five minutes, according to the height of the temperature, carefully watching the heart and giving whiskey and applying heat if the extremities are cold or there is the slightest sign of collapse, these measures will and must bring the temperature down.

The Value of Veratrum Viride in Puerperal Eclampsia.

This drug has been used quite extensively in puerperal eclampsia by eminent medical men with benefit in the theraptic Gazette is an article by J. Clifton Edgar concerning veratrum viride in eclampsia. In treating eclamsia he uses a combined treatment, rejecting any single specific treatment as unjust. His rules are to control the convulsions, empty the uterus under deep anesthesia by some method that is rapid, but that will cause as little injury to the patent as possible; eliminate the poison or poisons which cause the convulsions. Chloroform he says is the most reliable means by which to control the convulsions. *Veratrum viride* stands second only to chloroform in efficiency. Veratrum diminishes the pulse rate, and convulsons are almost unknown when the pulse rate is 60 or under. It reduces the temperature; it relaxes the rigidity of the cervical rings; it causes diaphoresis and diversis promptly. He gives it in doses of from 10 to 20 minium of the fluid extract, or half that quanity of Norwood's tinc subutaneously, and repaet every twenty minutes or half hour, until the pulse continues below 60 to the minute. The patient shonld be kept in a recumbunt position while under its influence.

Syphilis of the Liver.

The principal treatment of leutic affections of the liver, says Max Einhorn, in Medical Record, consists in the measures directed against syphilis.

Iodide of potassium or iodide of sodium and similar preparations of iodine play an important role. At first two to three grams of the potassium salt are given daily, the amount being gradually increased to five or six grams. Larger doses I have seldom used.

Although in some cases potassium iodide alone may produce the desired result, yet I have seen the best results from the combincd use of this drug with inunctions of mercury (ung. hydrarg. 2.0 daily). The antiluetic treatment should be continued for a long time (two to three months and longer).

Beside the specific treatment attention must be paid to the following points: when icterus is present, glycerin (one teaspoonful t. i. d. half an hour before meals) has usually been of great service to me. In the presence of an anæmic condition, iron or arsenic with iron is indicated. Marked ascites may have to be relieved by puncture. In the same manner any other complications present must be treated *lege artis*.

Proper dietetic and hygienic management is also essential. The patient should sleep in a large, well-ventilated room, and be much in the open air during the day. The diet should be bland, but should contain a sufficient amount of nutritious substances. All alcoholic beverages must be forbidden, also the use of strong tea or coffee. Milk and milk soups (gruels), eggs, bread, vegetables, and stewed fruits should be freely given, whereas meats should be taken only in small quantities and not too often.

Massage for Neuralgia.

The term neuralgia is taken from two Greek words, and mean "Nerve Pain." Neuralgia may occur in almost any of the nerves, and is usually named after the nerves affected. In treating this painful affection massage has grown quite prominent. W. R. C. Latson, in Health Culture, says:

In neuralgia massage is of first importance, and here again for many reasons roller massage is preferable. For facial neuralgia ("tic douloureaux") the small facial roller should be used. This should be applied to the affected part, rolling at first gently, and then, as the sensitiveness becomes less marked, more firmly, up and down. Ten or fifteen minutes' application of the small roller as herein suggested will frequently relieve a severe attack of facial neuralgia.

In neuralgia of the intercostal nerves it is necessary first to locate the nerve which is the seat of the pain. For this purpose

explore with the finger tips, find the point of sensitiveness and follow this along its course between the ribs. Then apply the medium sized roller, passing it at first gently, then more firmly, over the section of the nerve which is the seat of the pain and tenderness.

Neuralgia of the neck or of the shoulder can be most conveniently massaged by a nurse or attendant. Take medium sized roller in right hand and pass gently up and down over the affected part. Gradually apply more and more pressure as the patient grows more tolerant. Ten minutes' rolling three or four times a day in connection with the general treatment described is undoubtedly the best treatment yet devised for this form of neuralgia.

Neuralgia of the spinal column, also sacral and coccygeal neuralgia, are best treated by an attendant. Even in these, however, the sufferer, if sufficiently robust, may also use the long double handed roller.

In crural neuralgia the medium sized roller is to be applied to the affected part, with either hand convenient. Here the tissues are more yielding and greater pressure may be used.

In all these various forms of neuralgia the application of the roller will be found the most convenient and effective method of massage. In no class of disorders are the advantages of this form of mechanical massage more marked.

Post-Partum Hemorrhage.

I. A. McSwain says, in the Memphis Medical Journal.

We should never leave the bedside of a patient who has had a serious post-partum hemorrhage until we are quite sure it is under perfect control, and the patient has safely reacted, and the after treatment and care of such patients is of the utmost importance to prevent sepsis, metritis and subinvolution.

This is somewhat old advice, but it is advice we should never forget.

Pus in the Pelvis.

Barden, in American Medicine, in his pader on pus in the pelvis, states that the condition is generally due to the indroduction of infectious microorganisms through the vagina and uterus, and hence through the uterine tubes or by direct infection of the lymphatics through the uterine wall and parametrium. The microorganisms generally found are bacillus coli, the gonococcus, the streptococcus and the tubercle bacillus. Prognosis depends upon the character of the infection, age of the patient, duration of the disease, physical conditions and personal environments of the patient. The treatment of the condition is the regular treatment of an abscess—incise, irrigate and drain. The drainage tube is inserted into the abscess through the posterior vaginal wall, and may be allowed to remain there until all signs of the pus have disappeared. The free end of the tube is left long enough to admit the nozzle of a fountain syringe, and the cavity is daily irrigated with a solution of potassium permanganate or mercuric chlorid of the proper strength. Internally such remedies as calcium sulfid, or a tonic of iron, quinin, and strychnia is given.

Rheumatic Exanthemata.

M. Behrend in Journal American Medical Association describes several cases of Rheumatic Exanthemata to establish Behrend's theory that articular rheumatism—personal or the inherited tendency—induces a predisposition to exanthemata and enanthemata. Multiform erythema exsudativum is frequently accompanied by swelling or pains in the joints. In these cutaneous affections the salicylates are indicated on account of their favorable influence on the rheumatic soil. The tendency to recurrence renders the prognosis unfavorable.

Surgery in the Insane.

Mayo in Journal American Medical Association gives his experience with surgical work in the St. Peter and Rochester hospitals, of Minnesota. He classes the indications into three general groups: 1. Those in which surgery relieves the physical ailment without reference to mental conditions. 2. Operations for the purpose of relieving mental symptoms. 3. Operations for the public welfare. As regards the first he thinks there is no question as to their value, and mentions a number of conditions in which he has found utility in operation; thus hernia, which, owing to their habits, patients are often unable to have relieved by ordinary mechanical methods, has been treated by operation. Also within the last four years considerable has been done for the relief of prostatic hypertrophy, gall-stones, cataracts, etc. In the second group, surgery has but a limited sphere. In epileptics there is but little prospect of good after two years of disease, and few epileptics are admitted to hospitals for the insane who have not suffered from the disease longer than this. Nevertheless, amelioration has been produced in two cases and he thinks that in some cases it may not be only warranted, but advisable. The greatest claims have been made for gynecologic work. The in-

sane woman should be relieved, not because of her mental condition, but on general principles, but there is little reason for hoping for more than the betterment of insanity. He has seen few, if any, cures brought about in this way, but much relief in suitable cases. Operations for the public welfare are of questionable propriety, and would not likely be sanctioned at the present time. Mayo, however, endorses Brower and Ochsner's suggestion of unsexing male patients by vasectomy, which is a safe, and may be made a painless operation. An analogus operation in women would be more dangerous and not permissible. Out of a total of 60 females and 40 males operated on for all causes, 16 per cent. of the women and 12 per cent. of the men were mentally improved about as we would expect from the physical relief afforded. As regards their physical condition nearly all were improved. Only one cure from insanity was reported. In conclusion, he says that the insane have from the surgical standpoint the same rights as the sane, no more, no less.

Treatment of Chronic Intestinal Catarrh.

Boardman Reed, in the International Medical Magazine, says:

The dietetic is the most difficult part of the treatment, and the most important. An almost exclusive diet of meat with a very free use of hot water—the pulp of lean beef or finely hashed beef or mutton, with just enough of lettuce or celery to act as a relish, and a slice or two of stale bread and butter daily—kept up for a few weeks, will often accomplish brilliant results in controlling catarrh, either gastric or intestinal; but there are important contraindications to such a regimen. When a dilated stomach, or one with a very poor motor power, coexists, as often happens, the large amounts of water will disagree unless given one glass at a time, and sometimes even then. When there is a very feeble heart, the superabundance of fluid involves dangers, and when the heart is enfeebled by gouty conditions, that is, overtaxed by forcing the blood through arterioles contracted by the alloxuric bases and other poisons produced in lithemia, there is the added danger that the overplus of meat will aggravate. Moreover, in patients having rheumatism or arteriosclerosis, as in the case of so many elderly ones, the meat diet often proves harmful.

But even in persons in whom no such contraindications appear, it is not always safe. I once saw a young lady become insane as a result apparently of such a diet after a few weeks' use of it; and in any case it can scarcely be continued in a strict form longer than three or four weeks. Perfect nutrition demands a proportion of about three-fifths carbohydrates and one-fifth fats in the diet, and if the system be long denied a due allowance of these, the metabolism is disturbed.

Measurements of Girls.

The results obtained by MacDonald in the Journal of the American Medical Association, in measurments of girls seem to prove that children of the non-laboring class are superior in physique and have a greater acuteness of sensibility. Girls in private schools are less sensitive to locality on the skin and more sensitive to pain before than after puberty. Among the average women he finds the blondes inferior in all measurments and less sensitive to pain. The first-born in both men and women are more sensitive to pain than the second, and the second less sensitive than the later born. Investigation of larger numbers are, however, necessary. The dolichocephalic in both sexes are less sensitive to pain than the brachycephalic. University women are more sensitive than university men. It seems that in the female sex there is greater acuteness of sensibility than in the male.

Malarial Infection and Its Prevention

Walter Shropshire gives some good advice in the Virginia Medical Monthly, when he says:

First, stop every case of malaria at once by adequate doses of quinine, for the longer it runs the greater the number of gametocytes formed in the blood, and the greater danger is the patient as an infector. By adequate doses I mean no less than two grams of quinine, and that either in an acid medium, or followed by an acid that will make the medium acid after it is taken; for quinine will not absorb in an alkaline medium. When the paroxysms are broken the patient should be required to take one gram at bedtime and a half gram the next morning on every sixth day for two months or more, and to sleep under mosquito netting or in well-screened houses the remainder of the warm season in our country. Urge the draining of all places calculated to afford larval development of the mosquito, and if drainage is impractical, treat them once a week with petroleum, even Beaumont oil would do.

Last, but not least, educate your patients up to these requirements; teach them to destroy all places suitable for mosquito development, to shun the mosquito, especially by sleeping under good mosquito netting; that malaria is easiest broken when it first

appears; that quinine will break it if given in adequate doses, and will not permanently injure the patient, and that curing each case promptly lessens the danger to other members of the family and community. And if some of you grow so enthused in your efforts to educate the laity that you transgress the code a little, I for one will be ready to forgive you.

The Use of Gelatin for Controlling Hemorrhage.

The many remedies used and recommended for the control of hemorrhage are many. The two most used are morphine and ergot. In 1896 Dostris and Floresco reported to the Society of Biology at Paris that intravenous injection of gelatin into dogs cause rapid coagulation of the blood drawn from their vessels. This is an interesting subject and Joseph Sailer, in the Therapeutic Gazette, giving his experience concerning gelatin says:

Gelatin increases the coagulability of the blood, whether applied locally, taken internally by the mouth, or injected subcutaneously or intravenously. Applied locally it is usually harmless, and may, as Carnot suggested, aid in healing by improving the nutrition of the cells, although I regard this as doubtful. It may be injurious by promoting bacterial growth, and should probably always have some anti-septic added to it. Injected subcutaneously or intravenously it is entirely harmless, and when the technique is perfect, practically painless. The solution should be throughly sterile; the dose employed should vary from one to three grammes of pure gelatin. When administered by the mouth from 1 to 300 grammes, or perhaps more, shoud be employed daily. It is of advantage in any form of local hemorage, such as epistaxis, hemorrhoids,or injuries. It checks certain forms of internal hemorrhage, such as hemoptysis, hematemesis metrorrhagia, melena neonatorum. It appears to be the best remedy at our command in the treatment of hemophilia, and to be of great advantage for purpura hemorrhagica, and in hemorrhagic forms of infectious disease. At present it appears to be consraindicated in only one condition, viz., acute nephritis.

The Mouth as an Index to Disease.

Gramm, in the Journal of the American Medical Association calls attention to the symptoms afforded by the mouth as indicating the physical condition of the patient, and especially to three morbid conditions: 1. That form chronic congestion of the free margins of the gingival followed by parallel white lines of decalcification of decaying teeth, which he thinks is a sign of underlying intestinal indigestion and especially of acid dyscrasia. 2. Persistent caries of the teeth' which he has often seen as a solitary witness to altered metabolism. It may occur in pregnancy; he has often seen it in young girls between the ages of 12 and 15, and it calls for general prophylactic treatment. Lastly, he refers to the neuro-atrophic condition called Rigg's disease,which usually calls for general physical examination. Such examinations have led to the discovery of unsuspected cases of incipient diabetes. All nutritive diseases are prone to betray themselves in the irritation of the dental periosteum.

Ophthalmia Neonatorum, Its Prevention and Treatment

Perhaps few of the visible afflictions of our fellow-men excite our sympathies to a greater degree than that of the loss of vision. We pity the starving poor, but their condition can be easily ameliorated by financial aid. We sympathize with the bereaved, of course, but time partially heals many a deep sorrow. The crippled often forget their misfortunes in their many and varied enjoyments. These are the words of Adolph Blitz, in a valuable article in the Medical Sentinel, and at the close of it he says:

Strict antiseptic measures before birth—thorough cleansing of vagina when suspicious discharge is present.

Cleansing and disinfection of hands of physician and nurse.

Wash the eyes of the new-born first, then the rest of the face, the head, and the body last.

Use a sufficiently strong disinfecting solution *at once*, in the eyes of the infant, when sure, or suspicious, of gonorrhoea in the mother; but a mild cleansing wash only when no disease exists in the vagina.

Inspect eyes of infant daily, during the first week after birth, if possible; if impossible, instruct nurse to report at once, if eyes show any redness, swelling or discharge of offensive secretions.

Because of sudden exposing of cornea for inspection, it may burst and destroy the eye.

Begin the treatment promptly and follow it up rigorously, if apparent that it is a case of true ophthalmia blennorrhoica.

The physician must himself apply the medicines once a day at least, not delegate it to others.

Employ absorbent cotton in cleansing the eyes; never dip it again into the water—or medicines—after touching the eye with it,

nor use the same piece for the second eye. Cotton is cheap and you can afford to use it freely. Use it also for applying the silver nitrate.

Persist in the treatment until all inflammation has disappeared and the most possible amount of vision restored.

Tuberculosis of the Bladder.

Homer E. Fraser, in Brooklyn Medical Journal, finds that tuberculosis of the bladder is a serious disease, insiduous in its onset, and when complicated with pyogenic infection the percentage of recoveries is small. That the uncomplicated cases may remain quiescent for years, and may recover under suitable conditions. That operative procedure is limited and, as a rule, unsatisfactory.

Relation of the Alkalescence of the Blood to the Urinary Reaction.

The following inferences are drawn from an article upon this subject by Heinrich Stern in the New York Medical Journal:

(*a*) The higher degree of urinary acidity concurs with a lessened blood alkalinity and the increased alkalescence of the blood with a decline of the urine's acidity.

(*b*) There is no permanent and absolute ratio between blood alkalescence and urinary acidity.

(*c*) The blood, under normal conditions, possesses a certain inherent alkalinity. The degree of alkalescence possibly varies slightly for certain periods of the twenty-four hours, but the influence of the ingesta upon these variations is neither a material one nor always determinable.

(*d*) The degree of blood alkalinity is normally not affected by the *quantity* of the ingesta. The *quality* of the nutritives may normally contribute toward the rise and fall of the blood's alkalinity, but only to a very limited extent.

(*e*) A portion of the substances elaborated from the nutriment will be egested without having been conveyed to the blood.

(*f*) Some of the nutritive material, isolated and not utilized in anabolism, may be transferred into the uron in a more direct manner, and thus the accidental variations in the urinary reaction may be partly explained.

Treatment of Eclampsia.

In 6902 births A. Glockner, (Journal American Medical Association) at the Leipsic clinic, eclampsia followed in 143, that is in 2.07 per cent. Of this number, 80 per cent. were primiparæ; 85.44 per cent. of the 158 children survived the birth. More than 1 per cent. of albumin was noted in 77.5 per cent. Omitting the moribund cases the mortality was 15.49 per cent. In two instances epilepsy developed subsequent to the eclampsia in patients 22 and 26 years of age, respectively. The treatment was venesection, without infusion of salt solution; the os was dilated with a rubber bag or enlarged by incision between clamps, and delivery was accomplished at once in profound narcosis. In four cases the convulsions were arrested for twenty-five to seventy-nine hours after one to three venesections. Every case was treated by lavage of the stomach and injection of a solution of some vegetable acid, usually tartaric. In one case a primipara was delivered in seventeen minutes after operative and bloodless dilatation of the cervix. None of the patients succumbed to hemorrhage and only .68 per cent. to sepsis.

Post Partum Hemorrhage.

There are times when postpartum hemorrhage baffles all routine measures, such as hot douches, ergot by the mouth or beneath the skin, packing the uterine cavity, &c.

After depicting in a remarkably realistic and vivid manner a case of fatal postpartum hemorrhage, Dr. Bishp says (Merck's Archives) that the great and common error is to direct our efforts towards exciting uterine contractions. Rather should we consider that the uterine muscles, being exhausted in such cases, *cannot* contract efficiently, and resort to other methods of checking the hemorrhage. What do we do if a vessel of the leg is bleeding? Do we not raise the limb so that the bleeding spot is higher than the heart? And why not do the same in our emergency? Elevate the uterus until it is above the level of the heart. This is accomplished best and quickest by placing a table under the foot of the bedstead. Now that the patient lies in the Trendelenburg position, the venous flow of blood is controlled, and it remains to check the arterial. Bearing in mind that the bleeding uterine arteries come directly or indirectly from the aorta, we shall understand how compression of this vessel can stop the hemorrhage. We have only to press on the abdominal aorta with our closed fist to check the flow of blood from the uterus. While the compression is being kept up we can utilize the time by removing clots, membranes, etc., from the uterine cavity. As soon as the uterus recuperates and begins to contract firmly, the compression of the aorta may be gradually abandoned.

The game of chess is taught in all the Australian public schools.

Vaginal Drainage in Non-Operative Cases.

C. M. Fulton, in American Journal of Surgery and Gynecology, says, surgical vaginal drainage is to be recommended in the following conditions:

In all abscesses in the broad ligament, and in tubal and ovarian abscess when these organs are most in the cul-de-sac; also in hydrosalpinx.

In extrauterine pregnancy, if rupture has taken place beneath the broad ligament.

In septic inflammations around the uterus following child-birth or miscarriage, incisions may be made both in front of and behind the uterus, and the incisions packed with gauze, which drains away the septic material and keeps it out of the lymph channels, and prevents general sepsis.

Symptoms of Typhoid Fever in Infancy and Childhood.

J. P. Croze. Griffith in Journal of American Medical Association says:

One of the characteristics of typhoid fever in children is the tendency for the nervous symptoms to predominate over the intestinal. This by no means implies that nervous symptoms are more common on and more severe in the disease in childhood than in adult life. On the contrary, in the majority of cases in childhood they are trifling or absent. Extreme torpor and the tendency to coma, coma vigil and carphology occur much less often than in adult life. They are especially rare in young children. Headache is a common symptom, especially at the beginning, but no more so than in adults. Slight delirium is apt to occur, especially at night. A certain degree of apathy is very common and often one of the most characteristic symptoms, especially in young children.

A condition not infrequently seen at the beginning, and liable to cause confusion in diagnosis, is that of pseudomeningitis. Meningitic symptoms do, it is true, occur in adult typhoid also, but certainly less characteristically. As a rule, the diagnosis can be made easily, but I have seen typhoid fever begin in children with all appearances of acute leptomeningitis, and lead for a time to an entirely erroneous diagnosis. Aphasia is a nervous symptom rather to be considered as a complication. It is generally said to occur more frequently in childhood.

The Treatment of Acute Hip Disease.

Robert W. Lovett writing in the New York Medical Journal comes to the following conclusions in reference to the treatment of this disease.

Cases of hip disease permitting not over 25 deg. of motion in flexion or extremely irritable cases should be treated by the best obtainable fixation plus traction. Treatment by recumbency is not generally necessary even in the most acute cases, if the apparatus described above is applied to the hip in the position of deformity. This deformity generally disappears under this treatment. The splint should be removed as seldom as possible, and the hip should not be disturbed by frequent examinations.

Cases allowing 25 deg. to 45 deg. of motion in flexion may be treated by Dane's splint with high shoe and crutches in preference to any other form of traction splint. Personally, I should extend the use of the spica traction apparatus to most of these cases in the hope of shortening the disease by over-efficient treatment, but that position could perhaps not be successfully defended.

The use of the Davis-Sayre-Taylor long traction splint, with one or two perineal bands, should be limited to cases allowing well over 45 deg. or motion in flexion, and should be used with high shoe and crutches to prevent the intermittent traction necessarily incident to walking on the splint.

It is probable that the more rational use of combined traction and fixation would lead to better results in conservative treatment in shortening the disease and improving the functional results than can be obtained by the routine use of traction.

Meniere's Disease.

Bachmann discusses this subject and gives a report of a case in Philadelphia Medical Journal.

The author states that the disease occurs more frequently in the male sex at about the age of 30, and that syphilis and the rheumatic diathesis seem to be the most frequent direct causes. Other important etiological factors are senile changes, leukemia, simple anemia, hemorrhages, serous effusions, cerebral disturbances, parotitis, and influenza. While much of the pathology is still obscure, inflammation with or without hemmorrhages is the chief lesion. The cardinal symptoms are vertigo, tinnitus aurium, progressive deafness, and gastric disturbances. Other symptoms are nystagmus, volitional tremor, loss of memory, and weakness of the extremities. The author gives the report of a case of Meniere's disease which occurred in a man, aged 67. The symptoms began 3 years before the patient came under the observation of the author. The patient improved, but not wholly recovered under the treatment, which consisted of the administration of potassium bromide, 7 grains, and hyoscin

hydrobromate, 1-200 of a grain, given three times daily for over a month. He was then placed on salicylic acid, 10 grains, and potassium acetate, 5 grains, gived three times daily. Pilocarpine injections were used weekly in addition to the salicylate treatment.

The Progress of Traumatic Histeria, Based Upon the Subsequent Histories of a Number of Litigated Cases.

It is safe to say some day or other every physician and surgeon will be confronted with a case of tramatic hysteria. The disease may be easy of recognition, but it may also present dianostic difficulties for the most expert. Pearce Baily in Medical Record, says:

From all points of view hysteria is a very troublesome affection to deal with. One has to handle the families of hysterical patients with gloves. They are very loath to acknowledge that a relative of theirs can walk but won't, can see, although he thinks himself blind, or has no organic basis for the exaggerated symptoms he presents. They want medicines to be administered, they rebel at the suggestion of isolation, and they soon tire of a doctor who fails to cure. On the witness stand also, hysteria offers many perplexities to the expert. With a full desire to be fair, the medical witness if he is for the plaintiff, has difficulty in presenting his statement in a way to convince the jury that the plaintiff, although he really has nothing the matter with him, is a sick man and not an imposter. When on the other hand, the medical witness is retained by the defendant, the jury is prone to discredit testimony which maintains that physical deformities can depend merely on idea; for the plaintiff is generally brought to court and is almost sure to present the acme of all the symptoms he has ever had. The hopes for fair settlement are almost none, when, as often happens, the medical experts have failed to recognize the nature of the disease, and testify to all manner of impossible organic conditions.

Peculiar Nervous and Uninary Manifestations Following La Grippe in the Aged.

In the study of la grippe in those in and past the prime of life, peculiar manifestations and conditions exist. In a young person the vital resistance is great, while in those verging senility, the weakened forces afford a less degree of resistance to the assaults of this disease, O. P. Kernodle, American Medicine, sumarizing these cases find that aged persons suffer more violently from la grippe than those in youth and vigor; the manifestations are more marked and profound in the aged, and never entirely disappear; nephritis and uninary disturbances are more pronounced and lasting, and there is a more decided tendency to recurrence, resulting in the death; owing to the worn-out and deteriorated physical condition and lowered nerve resistance the results are more grave, the assaults more violent and profound and the death-rate much higer in persons over 50 years.

Sanitation of Prisons.

Most commendable progress, Geo. M. Koher, in Journal of American Medical Association, has been made in construction and management of modern prisons.

The mortality at the close of the last century among prisoners in some of the French prisons, was 250 per 1,000; between 1840 and 1849 it was still 80.2 per 1,000, at St. Gallen, while to-day it is less than 30 per 1,000. Tuberculosis, typhoid fever, diarrhœa, croupous pneumonia and mental disorders are the most prevalent diseases, but much will be done in future to reduce the excessive mortality by improved lighting, heating, ventilation, good food, bathing facilities, etc.

In some of the damp, dark and gloomy prisons of Germany over 50 per cent. of all the deaths are from tuberculosis. In the Mili-bank Prison of London, from 1825 to 1842, there were 175 deaths, of which no less than 75 were due to tuberculosis. Besides, 90 prisoners were set free on account of being hopelessly afflicted with pulmonary tuberculosis. In the Illinois State Prison, at Joliet, during the year 1895, 39 deaths were reported from tuberculosis; in 1900 only 8 occurred. This decrease appears to be due directly to segregation of tuberculosis subjects.

The Plague.

The pestilence which is at this moment in the foreground of interest, the bubonic plague, may be instructive to us in several respects. Dr Robert Koch writing in the British Medical Journal says:

People used to act upon the conviction that a plague patient was in the highest degree a centre of infection. and that the disease was transmitted only by plague patients and their belongings. Even the most recent international agreements are based on this conviction. Although, as compared with formerly, we now have the great advantage that we can, with the aid of the microscope and of experiments on animals, recognize every case of plague with absolute certainity, and although the prescribed inspection of ships, quarantine, the isola-

tion of patients, the disinfection of infected dwellings and ships, are carried out with the utmost care, the plague has, nevertheless, been transmitted everywhere, and has in not a few places assumed grave dimensions. Why this has happened we know very well, owing to the experience quite recently gained as to the manner in which the plague is transmitted. It has been discovered that only those plague patients that suffer from plague-pneumonia—a condition which is fortunately infrequent—are centres of infection, and that the real transmitters of the plague are the rats. There is no longer any doubt that, in by far the majority of cases in which the plague has been transmitted by ocean traffic, the transmission took place by means of plague among the ship rats. It has also been found that wherever the rats were intentionally or unintentionally exterminated the plague rapidly disappeared; whereas at other places, where too little attention had been paid to the rat plague, the pestilence continued. This connection between the human plague and the rat plague was totally unknown before, so that no blame attaches to those who devised the measures now in force against the plague if the said measures had proved unavailing. It is high time, however, that this enlarged knowledge of the etiology of plague be utilized in international as well as in other traffic. As human plague is so dependent on the rat plague, it is intelligible that protective inoculation and the application of antitoxic serum have had so little effect. A certain number of human beings may have been saved from the disease by that, but the general spread of the pestilence has not been hindered in the least.

The Mosquito an Insignificant Factor in the Propagation of Yellow Fever.

John H. Purnell, in an excellent article in the Philadelphia Medical Journal, on this subject, writes:

Among the many sanitary measures adopted, looking to the control of yellow fever epidemics, and to the complete eradication of the disease, no exertions were ever directed toward the mosquito's extermination, until the onslaught was made on the hatcheries around the suburbs of Havana within the last four months. Other islands besides Cuba, in the same vicinity, suffered from the ravages of yellow fever, and succeeded in freeing themselves from it, but not by the use of coal oil, insect powder and mosquito bars! Several instances, within the last few years, in the South have occurred where yellow fever has been completely stamped out, without so far as is known, the killing of a mosquito. In 1899 the disease appeared in the Soldiers' Home at Fortress Monroe, and by establishing camps, and prosecuting sanitary measures, the epidemic was promptly checked. No effort was directed toward mosquito extermination, nor was there in the control of the fever at McHenry, Miss., by the Marine Hospital Service and the Mississippi State Board of Health.

Malarial Fevers in Central America.

Malarial fevers in tropical America present certain features, says J. Hobart Egbert, in the Record, of special interest to the clinician:

To him who still retains a fair remembrance of the anatomical discourses of collegiate days, the part played in the pathology of this disease by that portion of the circulation comprehended by the vessels of the cœliac axis and the organs with which they are so intimately related, cannot escape observation. The liver, the spleen, and the stomach are all involved; the latter apparently, quite passively, the liver quite actively, and the spleen energetically. The writer has frequently submitted to careful physical examination victims of various attacks of tropical malaria—both during an attack of the fever and after varying periods of time have elapsed since an attack. During an attack the gastric and hepatic disturbances are usually quite severe, but it is the splenic involvement which is often a particular cause of trouble after the regular routine fever and chills have passed. So common is this disturbance of the spleen that many natives who present themselves for treatment of digestive disturbances, and particularly of those accompanied by pain and swelling of the abdomen, frequently remark: "*Quien sabe, si es inflamacion del bazo que tengo*," ("I don't know if it is inflammation of the spleen that I have"), or they will make a positive, and sometime correct, diagnosis, and say, "*Tengo el bazo inflamado*," ("My spleen is inflamed") and specially request remedies for the same.

The Origin of Gout.

Willian Ringrose Gore, in Indian Medical Record, says:

Gout is due to the presence of uric acid in the blood; the symptoms of gout are due to a toxin; the concurrent presence of uric acid is due to the action of the toxin on the liver; the toxin is formed by the action of one of the intestinal bacilli on an intestina secretion specifically altered by diet, this alteration being assisted by ahreditary disposition.

Leucocyte Counts in Hemorrhage.

It has been conclusively demonstrated that the loss of blood in man and the higher animals is followed by an increase in number of leucocytes in the circulating blood. Geo. Douglas Head, in the Journal of the American Medical Association, concerning this subject, concludes an article as follows:

In dogs a diminution in the number of white blood-cells in the circulating blood immediately follows a profound hemorrhage.

This initial leucopenia is followed sooner or later by an increase in the number of leucocytes in the circulating blood. This is the so-called post-hemorrhagic leucocytosis of all writers.

This leucocytosis of hemorrhage continues for at least seven days, and in some cases much longer.

The writer believes that what he has demonstrated in dogs is equally true for human beings, viz., that in human beings, immediately following hemorrhage, there is a decrease in the number of leucocytes in the circulating blood, which has heretofore been overlooked and assumed not to exist, because hematologists have failed to make their counts early enough after the hemorrhage took place.

Pancreatitis.

A. W. Mayo Robson, in Indian Medical Record, says the facts concerning hemorrhage in diseases of the pancreas, and the conclusions drawn after carefully considering the whole subject, are:

1. That in certain diseases of the pancreas there is a general hemorrhagic tendency which is much intensified by the presence of jaundice.

2. That hemorrhage may apparently occur in the pancreas unassociated with inflammation or with jaundice, or with a general hemorrhagic tendency.

3. That both acute and chronic pancreatitis can and do frequently occur withont hemorrhage.

4. That some cases of pancreatitis are associated with local hemorrhage.

Nephrorrhaphy.

The operation of nephrorrhaphy dates back only to 1881, when Hahn, of Berlin, introduced the operation as a substitute for nephrectomy in the treatment of moveable kidney. Chas. P. Noble, in the Indian Medical Record, discusses this subject freely, giving the technique and his experience for many years. In concluding his article he makes the following recommendations:

Careful discrimination in diagnosis in order to separate cases in which moveable kidney is a coincidence in a case of neurosis from those in which it is the cause of local and reflex symptoms.

Resort to the rest cure for cases of slightly moveable kidney, especially in young women.

The employment of symptomatic treatment in cases in which the relation between the moveable kidney and the nervous symptoms present is uncertain. Nephrorrhaphy should be employed in these cases only after non-operative measures have failed to afford relief.

The immediate resort to operation in those cases in which local symptoms, such as pain, sense of weight, or symptoms of strangulation, are present, and when the examination of the urine shows indications of congestion of the kidney, such as the presence of hyaline casts, or albumin.

Ovarian Symptoms and Their Value as Evidence of Ovarian Pathological Condition.

L. W. Atlee, in an article in the American Journal of Obstitrics, says:

The treatment indicated for reflex ovarian symptoms is the correction of the morbid conditions giving rise to them; and in the searching light of modern scientific medicine, with its numerous aids to a correct diagnosis, a better understanding of cause and effect in these cases, and hence a clearer and truer deduction from premises, we will find the indications for spaying narrowing themselves down to a quota that will make a very small figure when compared to those of a decade ago. The number of women who are now walking demonstration of the futility of this measure are a lesson from which much may be learned, and they can cry out against such treatment in the words of Talleyrand "worse than a crime, it was a blunder."

Has the character of the practitioner of medicine changed since the great Cullen wrote, one hundred and fifty years ago, these harsh words: "The great horde of physicians are always servile imitators, who can neither perceive nor correct the faults of their system, and are always ready to growl at and even worry the ingenious person that would attempt it."

Few of us are able and fewer still are willing to break up trains of thougth to which we are inured.

Obstetrical Nursing.

You must learn the meaning of one word, says Louis Fangeres Bishop, in Obstetrics—Antisepsis.

You must learn the meaning of one other word—antisepsis. Asepsis is the condition

of the absence of sepsis. Antisepsis is the process of destroying infection if present or carrying on such operations which would destroy it if it should be present. When we are sure that asepsis exists we need not employ antisepsis. Antiseptics is the name given to substances which have the power of destroying germs. Their use in connection with instruments, or even of the human body, is always a field for the exercise of judgment. I remember a nurse, ignorant of the purpose of these substances, who destroyed the germs in a patient's scalp with strong carbolic acid; the germs were destroyed and so was a part of the patient's scalp. Likewise I have known a steel instrument to be boiled in bichloride of mercury with a result, no doubt, of producing complete antisepsis, but likewise the destruction of the instrument. The problem is to destroy the germs without destroying the person or the thing that has given a foothold. This problem in a much more intricate form confronts physicians in the treatment of diseases due to germs pervading the whole body. It is a simple and straightforward idea to administer non-poisonous antiseptics, such as salol or boracic acid, with the faith that they will be taken up by the stomach and circulated in the blood to destroy the germs that are causing the illness, but practical experience up to the present time has not brought forth any such antiseptic. The destruction of germs in the body does take place but it follows a definite and natural scheme. The germs themselves produce in themselves living substances which finally lead to their destruction. These substances are called antitoxins, and it has been found possible in certain instances to produce these outside of the body and by introducing them into the circulation of the patient, to hasten the natural processes of germ destruction. Unfortunately, the germs of puerperal fever are not capable of this form of treatment, so they must be attacked before they gain entrance into the human body.

Puerperal Eclampsia.

T. J. Beattie (Journal American Medical Association):

The etiology of eclampsia is still a morbid question. When the blood of eclamptic patients is examined, micro-organisms are rarely found, and from observations one can find no positive proof that any one germ has been isolated which will cause eclampsia. It is the general opinion that eclampsia is due to profound toxemia, the origin of this toxemia is still unknown. The prophylactic treatment is of the greatest importance. It is the physician's duty in assuming charge of a case of pregnancy to keep himself informed of her general condition. Hygenic measures embracing moderate outdoor exercise, good food, frequent bathing, and to watch the action of the kidneys, liver skin and bowels. Examinations of the urine should be often enough to keep one informed of its specific gravity whether there is a diminished elimination of urea.

The Management of Delirium Tremens.

There are two things to be avoided in the treatment of delirium tremens says V. A. Ellsworth in Boston Medical and Surgical Journal. He says hypnotics and alcohol should never be given in any form. Any drug given to produce sleep in active delirium is attended with great danger, the effect being to depress the hearts action rather than to produce sleep Alcohol should be prohibited, as it acts as a depressant rather than a stimulant, and continues the toxic condition. In my experience with over 500 cases never has one been put into a straightjacket or hampered in any way, nor has one been allowed one drop of alcohol after being placed under my care. Out of these 500 cases I am proud to report only 2 deaths, and these were cases that had been kept and cared for at home as long as possible, and they were almost in a state of collapse when I first saw them. I attribute my success (1) to the perfect freedom I allow the patients; that is not hampering their movements in the least; (2) in keeping the room thoroughly ventilated, giving freely of cold water and good nourishment at short intervals, and last but not least, in allowing no alcohol whatever.

The abortive form of delirium tremens may be of considerable frequency, although it is not often seen in institution work.

There is a time, if seen early, when sleep can be produced by the administration of some hypnotic like paraldehyde without danger to the patient, and many times the delirium aborted. I wish to say that I consider paraldehyde the best remedy to produce sleep in alcoholism of any I have ever tried, and accompanied with the least danger. In active delirium, if I find the heart lagging, I give frequent and small doses of digitalis. I also find that cold shower baths are attended with good results in calming the excitement, especially if the patient is strong and able to bear it, and is free from any enfeebled heart-action.

Nephritis Gravidarum.

Gaucher and Sergent have investigated the clinical history in many cases of nephritis gravidarum (Homeopathic Journal of Ob-

stetrics). In many cases albuminuria seems to exist as a primary condition and does not necessarily mean that nephritis is present. They are probably autotoxic in character. All cases, however, which show albuminuria are to be watched with suspicion, for the same antointoxication which produces albuminuria would seem capable, if prolonged and repeated, of causing actual disease of the kineys. There seems to be a long series of forms intermediate between simple albuminuria and chronic Bright's disease. It would seem in very many cases that there is a strong tendency to spontaneous recovery, but, on the other hand, this condition may reveal indelible traces of the kidney lesion, which later, especially during the course of a subsequent pregnancy, developed into a nephritis. The writers quote Brault as stating that pregnancy essentially favors the development of nephritis, especially in chronic forms. Albuminuria appearing in a first pregnancy tends to disappear, in a second it remains longer, until in succeeding ones it becomes permanent, though at the same time many cases of repeated and marked albuminuria sometimes recover completely. At times in many cases there is transitory general œdema, with alteration in the specific gravity and in the appearance of cases. Such cases are generally met with in primiparæ, and these signs generally appear towards the end of utero-gestation. In those cases which are destined to become permanently established the heart shows hypertrophy with bruit de galop. Such cases develop all the symptoms and signs of marked interstitial nephritis, while others show considerable œdema and that series of signs and symptoms which we are accustomed to associate with large white kidney. It can be stated, therefore, that nephritis gravidarum does not assume any one particular form of kidney lesion. In point of fact, post-mortem examination has revealed several marked cases of granular contracted kidney. The prevailing variety seems to be the sclerotic. The writers do not consider that the explanation of nephritis gravidarum is as yet forthcoming. To call it autointoxic is correct, so far as it goes, but the form in which it occurs has still to be elucidated.

The Present Status of the Surgery of the Prostate.

The prostate gland still gives us trouble and the new and various methods propounded for benefit in its treatment are always welcomed. William N. Wishard, in the New York Medical Journal, sums up an able article as follows:

To sum up the foregoing, it may be said that operative procedures are of the greatest value when undertaken early, and that where they are long deferred, serious resultant bladder, urethral, and renal diseases make the outcome increasingly dangerous. It should also be remembered that where the catheter has failed to give adequate relief, death is reasonably certain to occur ere long, especially in cases where the urethra has greatly increased in length by the elongation of its prostatic end, unless the suprapubic opening for either prolonged drainage or for the removal of the obstruction is done. If the symptoms are not of a severe type and are not amenable to the catheter, and if the length of the urethra from the meatus to the point where the urine is obtained does not exceed nine inches, a perineral opening generally affords opportunity for stretching the entire length of the prostatic urethra for dividing the small-shaped growths around the bladder end of the canal, and for removing the small projections by the finger, forceps or cautery. One-fourth, or, as asserted by some, one-third of the operative cases are suitable for perineal opening. If the suprapubic operation has been thoroughly done and the obstruction all removed, the patients afterward are assured of more perfect bladder function than by any other method. It must be conceded, however, that, in view of the serious dangers involved, many cases should be subjected to nothing more than the formation of a suprapubic channel, as suggested by McGuire and modified by Morris. Morris's improvement lines the channel with skin, and hence it is not so apt to contract.

Mental Therapeutics.

The subject of mental therapeutics occupies quite a good deal of attention at the hands of our profession to-day. Quite a long and valuable article is contributed to the Southern California Practitioner by Norman Bridge upon this subject. In his closing remarks he says:

A certain new few cardinal things are, I believe, necessary to be done in the care and culture of the people, and they are mental and moral mostly.

1. We must lessen the emotional attentions to infants. These wear out the brain energy and produce erethism that may last through life. Almost any infant can, in three months, be developed into an autocrat; and many of them have, before the end of the first year, true neurasthenia resulting from these influences.

2. As far as possible we ought to let the children alone, and stop the common incessant effort to entertain them. The effort continues the vicious effects of too much

emotional attention in infancy. Let them entertain themselves; this will develop their minds and rest their emotions. We must observe them and talk about them in their present less. Otherwise we are sure to provoke a series of most vicious emotions that grow into habits that influence them in a bad direction through life. Fairy tales and fairy talk are unwholesome. The average child already has too much imagination; it is a beautiful thing, but it is not necessary to increase it. There are difficulties with these rules for infants and children. Two motives actuate parents and children alike. The first is to make and have the children happy and pleasant now. The reflex effect on their elders is sweet; we like a happy child, and like to make a child happy. Thus we and the child conspire to the same end. The second motive is to make sure that if possible, the career of the child shall be long and successful. Both emotions are for the rising individual as we understand it, the one for the now, and the other for the future. Is it any wonder that we should generally sacrifice the future for the present? The child is incapable of foregoing a present pleasure for a future good, and the parents are too ready to agree not to count this day's indulgence when they know its ulterior effect is bad. The mother carries the child for hours to get it to sleep, not because it is necessary, but because it likes to be carried and refuses to sleep without it. She says the baby will not go to sleep otherwise, but if she thinks she knows this to be a tender-hearted fiction, her fault is lack of courage to break the habit. As the child gets older and begins to acquire habits that she fears may make him inelegant or impolite she has no hesitation in working for his future and she will drill him by the hour and worry by the day about his manners (that at fifteen he would spontaneous correct) and let him go on with nervous injuries that will last him through life. Parents think it a terrible thing if their boys smoke cigarettes, but they have allowed habits of the nervous system from babyhood up that are even worse for the future of a boy than smoking cigarettes in his teens. Parents who have perpetually entertained, coddled, and diverted their children, who have jumped to their call as to the command of a superior being, are by logic and nature estopped from objecting to cigarettes, coffee, wine or late hours, when they pass into youth and would still gratify their desires for all sorts of stimulating amusements. None of these sins against nature is so great as those that have been earlier fostered and encouraged. Indeed, had their earlier sins never been committed many of these later indulgences would not be sought. The exaltation due to the earlier mistakes cannot be ignored in later life.

Parents plead that their children ought to be obedient and self-denying as to indulgences that harm, because they, the parents, have been good to them in their infancy and childhood, have found amusements and pleasures for them, and denied them little or nothing of joy. This is the very gist of the sin they have committed. If the emotional propensities of the children had received as much tranquil rest as their muscles did, their brains would have grown up with more normal demands and with better resisting power.

3. We ought to stop making young ladies and gentlemen out of children. To push them into responsible social life, as early as is the rule in the best social stratum, is to develop emotions and cares, and subject them to tests and temptations that ought to be postponed for years. And the only justification we have for it is our and their unwholesome pleasure in all, and their hoped for salvation from diffidedce later. The truth is that the diffidence is an advantage and ought to be encouraged rather than otherwise.

4. We ought to minify the emotional struggles at school as far as possible. The strife for suppremacy, the fear of failue, the envy and jealousy of others, constitute one of the most wearing tendencies on the brains of the young. Not all, by any means, but many of the school children suffer in this way. It is a duty to find out the ones most being harmed and worked for their lives.

5. An increase of the out-door, athletic lives of the people as a whole would be one of the greatest gains of all. In-door life keeps us below the par physiological, and to raise the standard of the system as a whole of course helps the brains.

To reduce and repress the unhappy emotions that are engendered by the struggle to shine in society and in business, is one of the urgent needs, and hardest services to render. These emotions are envy, jealousy fear of failure, sense of danger to our pride, all of which are wearing and depressing. This is the school experience carried into adult life; and with all its ramifications it does incalculable harm to the cerebral resisting power. To reduce the struggle itself as well as its bad emotions is quite as important. This ardor to do the duties that society and business seem to impose on us (and beyond the getting of bread), is not the whole cause of nervous overwork

among men and women, but it is a very large influence in that direction.

When a woman gets neurasthenia from so-called nervous overwork, the chances are six in ten that the excess of work was a demand of some sort of social fiction, and was thus by the highest ethics unnecessary. With men the percentage is only a little less.

7. Less dress-parade in our lives is necessary. Reduce the everlasting dressing of our bodies, houses, tables and equipages. It all becomes a bug-bear to the tired-out brain, and it tires the brain. It is what makes women say they feel like going crazy to think of packing their trunks for a trip to a fashionable resort, and it makes some of them really crazy. Such parade is a silly demand that our conceit and envy makes upon us, to the worry of the tired brains.

8. It is merely a truism to say that people who are carrying mind and body loads that are too heavy should have them lightened. If the load is apparently necessary and free from the vice of bad emotions, the rest is as truly necessary. Rest and change are demanded. These influences shift the bearings; take off the pressure from parts and powers that are tired, and put into exercise, faculties that have been dormant, so that the man as a whole is brought up, his brain and body are refreshed, and mental wreck is fought off.

It is the influences that I have condemned, that make the apparently inevitable revolutions of the wheel of society. It is a spectacle that the old world has furnished, only in a lesser degree, again and again. Many resourceful American families eventually go to the wall in the greater world influences, while their places are taken by people who have come up from humbler beginnings. The rise to power of these is due to the fact that they have suffered less injury from the emotions that grind and wear out the nerve force. They have lived simpler lives nearer to nature, and have been moved by ambitions that are less carking and unwholsome.

This continual revolution of the wheel is self-acting and wholly conservative for the world. The race and company fit to command usually in the long run come up to power. The lessening of grasp due to the dissipations incident to the use of power—the miscalled rewards of power—causes its victims to drop out of the struggle and give place to those not belittled by such influences.

But must this debauchery of resources always go on? And is the revolution of the wheel inevitable?

Typhoid FeverWithout Intestinal Lesions.

Opie and Bassett report a case, Journal American Medical Association which is apparently one of those in which the intestinal lesions are lacking, and review the literature. In other ways the appearance was that of typhoid, rose pots were present and a positive Widal reaction confirmed the diagnosis. Death occurred after complications, and at the autopsy the usual intestinal lesions of typhoid fever were not found, and Peyer's patches and the solitary follicles showed very little apppreciable change, only minute points of pigmentation were visible in the solitary follicles of the large intestine. The presence of blood in the stools during the latter part of the disease was not the result of ulceration, since the mucosa was intact. The child evidently died of typhoid fever complicated by a condition resembling purpura hemorrhagica. The authors doubt the entrance of the bacilli into the blood through the uninjured intestine and think it not definitely proven. The case reported, however, emphasizes the fact that the localization of typhoid bacilli is not exclusively in the lymphatic apparatus of the intestine and that the intestinal lesions of fatal cases may be so slight as to be recognizable at the time of autopsy.

Maggots in the Nose.

Maggots in the nose is a condition which rarely confronts a surgeon. Grave results are sure to follow unless properly treated. A very interesting case is reported by L Brandon in the American Journal of Surgery and Gyneology, a child had post nasal catarrh that followed a severe attack of dyptheria. She was treated by eminent specialist with the usual irrigations, sprays and antiseptic solutions. She did fairly well as long as she kept up treatment. Complaining of a severe headache, with right side of face much swollen and glistening, by the aid of a head minor nasal speculum and forceps the attending physician was able to see, and remove a great many maggots. In studying the habits of this child, it was found she was in the habit of going to the scrap box, used in connection with a meat market and take from it pieces of meat that had been there for some time and feed them to a pet dog, these scraps were trimmings of butchers meat, that were kept on ice, so that when exposed to heat it required but a short time for decomposition to take place. It seems evident that the eggs were carried from this decomposed meat to the childs nostrils by her fingers. From a study of this case

the writer comes to the following conclusions:

1. That patients, especialiy children, who have nasal catarrh should be warned of the danger of handling decomposed meats and other unclean material.

2. That chloroform is nearly as efficient in killing these worms as turpentine, which cannot be used in the nose in sufficient quantity to effect a cure, while chloroform can since it is but slightly irritating to the mucous membrane, and the pain it produces subsides in fifteen or twenty seconds, so it is not felt after coming out of the anesthesia.

3. Though in some cases chloroform by inhalation may be sufficient to effect a cure, as suggested by Dr. Ingalls in his treatise on "Diseases of the Chest, Throat and Nasal Cavities," it seems clear that it would not have effected a cure in this case. On account of the rapid multiplication of these larvæ and the liability of their producing meningitis, convulsons and death within a short period of time, as soon as the diagnosis is made in every case the patient should be put to sleep at once and enough chloroform forcibly injected into the nostrils to bring it in contact with every part of them. The chloroform can be prevented from entering the trachea and esophagus by having the patient only partially anesthetized, so as to be able to understand what is said With the patient in this condition, held in the sitting posture, with the head bent slightly forward, the nostrils can be thoroly injected by throwing into them two or three drams of chloroform with a glass syringe. In bad cases several doses should be used. It is well to tell the patient to spit out the chloroform that goes down into the throat.

4. If any curęting is done it would perhaps be best to use a blunt instrument, unless the operator is capable of recognizing necrotic tissue by the sense of touch with a probe.

Pelvic Surgery.

Deaver pleads for simplicity in surgical operations. He claims, Journal American Medical Association, that it means safety, surety, confidence, neatness and saving of time. He prefers the abdominal route in the majority of cases as being simpler of performance, safer, avoiding distributing infection, and reducing the danger of general peritonitis by the use of gauze packing. It offers less liability of injury to the bowel, ureters, and important blood vessels, and adhesions are less likely to follow. It minimizes the danger of hemorrhage and generally by the facility offered for inspection. It also enables the surgeon to operate with very few instruments. One of the greatest advantages is the possibility of the use of the Trendelenburg position. Radical operations per vaginam are with few exceptions, he thinks, to be discountenanced on account of the limited area for manipulation, and the impossibility of inspection without destruction and removal of the uterus, which should not be done except for good and sufficient disease of that organ itself. The greater liability to hemorrhage, primary and secondary, the greater danger of injuring the ureters, bowels, bladder and large blood vessels, and the danger of doing incomplete surgery are mentioned, also the inability to repair satisfactorily injuries to the bowels or bladder, and lastly, he mentions the inability to deal safely with inflammatory masses which involve the vermiform appendix. It is good practice, he says, to remove the appendix when the abdomen is opened for other reasons, if it can be done without added risk to the patient, as every human being who is without an appendix has a better chance in the struggle for existence than he who is menaced by the treacherous and touchy little organ.

The Treatment of Organic Stricture of the Male Urethra.

Concerning this old and important subject Rutherford Morrison writes interestingly in the Indian Lancet. At the close of his article he says:

Divide every stricture of the meatus.

Use intermittent dilatation in all cases of ordinary stricture.

There are two indications for continuous dilatation. 1. Urgency. 2. Difficulty.

There are two indications for internal urethrotomy. 1. Resilient stricture. 2. Irritable itricture.

There are two indicotians for external urethrotomy. 1. Bad stricture complicated with fistulæ. 2. Bad stricture complicated with cystitis.

There are two indications for perineal section. 1. Impassable stricture. 2. "Impossible" stricture."

Radicular Nævus.

P. Bolognini (Homeopathic Journal of Obstitrics, Gynecology and Pediatrics) reports the case of an infant, born after a normal labor and of healthy parents, who showed at birth a vascular nævus affecting the right upper limb. The skin had a reddish-blue color, a peculiarity which was almost exactly limited to the territories supplied by the posterior roots of the fourth, fifth, sixth, seventh, and (in part) eighth cervical nerves; the lower anterior and all the posterior territory of the eighth were

free from changes, as were also the territories of the first and second dorsal. Sensibility to touch, heat, and pain was normal, but the limb had larger measurements than that of the unaffected side, the temperature was higher, the arterial pressure was lower, the red blood corpuscles were more numerous and the hemoglobin lesson amount, and the epidermic desquamation was greater. The nævus extended also in the right side of the chest, both anteriorly and posteriorly, affecting practically all surface supplied by the first and second dorsal nerves. The author ascribes the anomaly either to the embryonic period of development or to the fetal epoch, and hazards the suggestion that some infectious condition of the mother may have had an influence upon a small part of the ectoderm of the embryo or upon the nervous system of the fetus (fetal neuritis). At the same time it is admitted that no infection in the mother had been recognized.

Tuberculosis of Tubes, Ovaries, and Peritoneum.

Upon this subject R. E. Cutts says, in the Western Medical Review. An operation is urged in all cases, unless it is in the very acute or those complicated with grave conditions in other organs. The presence of phthisis pulmonalis in the early stage should be an indication for, rather than against, operation, since the benefit to the general health from the improvement or cure of the peritonitis may produce a quiescence to the pulmonary conditions.

The Therapeutics of Subacute and Chronic Heart Disease.

Notwithstanding all of the recent advances in cardiac therapeutics, we are less and less disposed to advocate special remedies for special affections. Thomas Satterthwaite, concludes an interesting paper in the Medical News as follows:

In conclusion, the purpose of this paper will nothave been accomplished unless I have made it appear that the idea of complete rest has been surplanted by rest alternating with bodily activity; venesection by determination of the blood to the surface through resistant exercises and carbonated baths; hydrogogue cathartics have been replaced by stomachics and mild laxatives and diureties; heart stimulants by general nerve stimulants or sedatives, and nutrients, while drugs of the digitalis group are utilized chiefly for their diuretic action in renal complications, mainly parenchymatous nephritls or abdominal dropsy. Drugs of the digitalis group, including strophanthus, convallaria and adonis are always uncertain and therefore, always dangerous, and should only be employed either when there remedies are inadvisable or in kidney or liver complications, or where we are merely endeavoring to prolong life.

The Surgical Treatment of Chronic Ulcer of the Stomach.

The treatment of gastric ulcer is at first essentially medical, and when properly carried out, and for a sufficient length of time, it is usually completely successful. However, when medical treatment fails and the ulcer becomes chronic, we have to look to surgical methods for relief. From a surgical standpoint, in reference to the stomach, A. W. Mayo Robson, in the Philadelphia Medical Journal, is highly in favor of a method he has used since 1891. It is known as the method of suture over a decalcified bone bobbin. The advantages claimed for this method are:

That it secures the opening, being of the exact size intended, and that there is no possibily of the passage being made too small by the drawing up of the sutures before the knots are tightened.

That it secures an immediately patent channel between the two anastomosed viscera.

That the bobbin protects for from 24 to 48 hours the new line of union trom pressure and from the irritation of the visceral contents.

That it facilitates the application of the sutures and so adds to the expedition of union by sutures.

That uo foreign material is left in the alimentary canal, which may irritate or cause subsequent trouble, for the bobbin rapidly dissolves in the alimentary juices.

That the method has now been proved by ample experience to be rapid, easy, efficient and safe.

For stomach operations it is used in gastro-enterostomy, in pyloroplasty, in gastroplasty, and in pylorectomy or partial gastrectomy, and in the latter operation it is unnecessary to use more than two continuous sutures for the whole operation.

The Diagnostic Value of Blood Examination in Septicemia.

The blood changes of most importance in the diagnosis of septic diseases have been summarized by J. C. DaCosta, Jr., in the Medicus, as follows:

To recapitulate, the blood changes of most importance in the diagnosis of septic diseases may be summarized as follows:

Marked increase in fibrin, especially in the early stages of the disease.

The presence of bacteria in the circulating blood in occasional instances, always those of grave nature.

Anemia, the degree of which closely corresponds to the severity of the infection.

Leucocytosis, except in very mild and very intense infections.

The Treatment of Gastro-Enteric Infection in Infants.

The treatment of this disease is an old subject, the literature upon it has become enormous. Every general practitioner comes in contact with this disease and each one soon forms difinite and certain ideas as to treatment. John Zahorsky has an article in the St. Louis Medical Review, in which he states his treatment as follows:

Take the infant from a milk diet.

Administer a purgative.

Give some cereal decoction for one to three days.

Prescribe a mild antiseptic mixture which will do no harm to the patient.

Treat the dangerous symptoms.

Gradually restore a normal diet, by adding small quantities of meat broth, whey, or human milk to the cereal mixture.

Cow's milk should be given in very small quantities added to the cereal decoction.

The amount of food should be apportioned to the power of the digestive apparatus.

The majority of cases get well rapidly, the persistent cases require careful dieting and nursing rather than medication.

Whisky in General Tuberculosis in Children.

Tuberculosis in children is much more common than one would suppose without looking up statistics. B. C. Frazier, in the American Practitioner and News, is of the opinion that whiskey is one of the most valuable agents in the treatment of general tuberculosis in infancy and childhood; it really seems to take the place of food to some degree, and it is a great stimulant to the appetite and aids digestion. Fresh air, either salt air or the air of the pine mountains, seems to be very helpful in the majority of cases.

Pathology of Deaf-Mutism.

To acquire a scientiffc knowledge of the pathological conditions of the ear in deaf-mutism, we depend almost exclusively on *post-mortem* examination. J. J. Carroll, in the Journal of Eye, Ear, and Throat Disease, says:

Judging from the data furnished by the 150 autopsies referred to throughout this article, we may sum up the whole by saying that the pathology of deaf-mutism varies greatly; that all the anatomical alterations of the ear, which are capable of producing grave deafness, have been found in deaf-mutes; that no one organic lesion has been constantly present; and that, according to the present state of our knowledge, there is no single definite pathological condition which is characteristic of the disease. We need further investigation, more careful and intelligent study of pathological specimens obtained from autopsis on deafmutes. The subject offers a good field for the lovers of research work.

Whooping Cough Cured by Irrigation of the Nose.

Ed. Masten Payne reports a case whooping cough cured by irrigation in the New York Lancet. The writer is of the opinion that the disease is due to an irritation of the Schneiderian membrane by a specific organism. Acting upon this hypothesis he injected from 10 to 20 ozs. of carbolic lotion (1 in 40) by a syringe through the nostrils. He allowed it to pass up one nostril and down the other. He states that at first the solution was more or less painful, causing much sneezing, coughing, &c. After a few times the operation was less painful, and finally the patient was anxious for it to be used, giving him much relief. He further states that a cure was complete in a weeks time.

Complicated Fractures.

Franke. in Philadelphia Medical Journal, divides his researches in the treatment of complicated fractures into two parts, those of the extremities, and those of the skull. Modern aseptic treatment has made these wounds much less dangerous than they formerly were. In every case he tried to keep the wound aseptic, to put the fragments in good position, to keep up absolute rest, followed, after healing, by regulated, movements. The region of the wound was disinfected, and if the wound was small, and contained a foreign body, it was removed, the wound dried out with sterile gauze, and a sterile dressing applied. In large wounds, counterincisions, drainage, removal of splinters of bone, etc., followed, but washing out with antiseptics was never done. Large pieces of bone were saved, sharp edges being sawed off first, to prevent pressure on the blood vessels, and gangrene. When dislocation seemed imminent, bones were sutured together with silver wire. Attempts were made to cover the bone with soft parts, The injection of a little iodoform-ether, and drying with sterile gauze, completed the treatment. With this many limbs escaped amputation.

Even when gangrene was feared, conservative treatment was carried out. Yet some cases had to be amputated. Immobilization was secured by plaster bandages, extention, or splints. Roentgen photographs were taken regularly. The fractures of the skull were treated in much the same way. Wounds were generally enlarged, to see the amount of damage done. Even a greater attempt was made here, to make the surface smooth. Many blood vessels of the dura and pia were ligated. Where parts of the brain were badly injured, they were removed, as were foreign bodies, splinters, etc. If possible, clefts in the dura were sutured. Great care was taken to prevent bone defects. The bone was replaced, after being washed in a boric acid solution, and the skin closed over it. Osteoplastic resection was necessary in some cases. The histories of 73 complicated fractures of the extremities, and of 24 complicated fractures of the skull are given in detail.

Fibroid Tumors of the Uterus.

Chas. P. Noble in Medical Press and Circular says:

According to the classical teaching concerning the history of fibroid tumours, a fatal termination is very rare. At the present time it is not difficult to understand why this is true, because when the condition of patients suffering from fibroid tumors becomes grave, whether from hemorrhage repeated attacks of peritonitis, disturbances of the digestive organ, of the vascular system, or the urinary organs, they are submitted to operation. Patients operated upon when in bad condition swell the mortality of operations, and also greatly increase the list of those making poor recoveries after operation. Doubtless in the future the number of cases dying directly as a result of fibroid tumors or their complications will be less than in the past, because in a larger percentage an early operation will be performed. Nevertheless, numerous cases of death from fibroid tumours can be found in the literature.

Disease and Old Age.

When man reaches the zenith of his physical existence, he does not stand a perfect physical man, but already a hereditary predisposition, or the struggle of life for an existence or habit of vice, has laid the hand of decay upon some one or more organs of his system, so he starts down the declivity of his existence under disadvantages. The treatment of disease in the aged, writes J. L. Wolfe, in Medical Summary, should be different from what it should be in adult age. First, caution should be observed in diagnosis of the case, because, of complications which are almost sure to be present having been induced by the wear and tear of years of activity and toil. All applications and drugs should be avoided which tend to weaken the action of any vital organ. It is not a thing by any means unknown for the delicate aged to die at the hands of either an ignorant and careless or overbusy practitioner through indiscriminate or indiscreet medication.

An ordinary dose of an opiate for an adult given to an old, delicate person would possibly so overcome and depress the vital organs as to render them unable to resist the ravages of the existing disease, and death comes later as the result of the opiate; and the same might be said of antifebrin, antipyrin, aconite, and a vast number of other drugs in every-day use. Hence we urge caution to the extent of refraining from the use of the above-named class of drugs, except when the physician is cautious in the size of the dose and will remain at the bedside of the patient and notice the effect of the drug. Under certain circumstances they might be of benefit if so guarded.

The tendency of disease is to depression of the vital organs; the tendency of age is to depression. So we urge all to exercise great caution in the use of depressant drugs, lest the already flickering flame of life be entirely extinguished.

Plague and Its Prevention as a Disease Communicable from Animal to Man.

David Samuel Davis, writing about the plague in the British Medical Journal, says the following facts stand forth;

1. The disease did not spread by person-to-person infection.

2. The observed facts as to its spread can only be satisfactorily explained by assuming an animated host not human to diffuse the infection in place, and a second host to communicate the infection to man; the two hosts are the rat and the flea.

3. "Contact" in regard to plague infection does not necessarily mean one who has lately been associated with a plague patient; it means rather one who has been exposed in more or less close association with plague rate within five days.

4. Nearly all the cases were bubonic in type, a type very little infectious.

5. The outbreak originated in connection with a wharf, almost certainly through the landing of plague rats from infected ports. and the history of further infection in the town pointed definitely to the same means of distribution.

I need hardly labor the proof of the importance of rats in the spread of plague, especially as Professor Koch, in his now historical address before the British Congress of Tuberculosis, has affirmed it with a lucidity and directness which renders further comment unnecessary, nor do I think there will be disagreement on this essential point.

Accepting the rat origin of plague, I wish, however, to ask: Are our present regulations sufficient to prevent the introduction of plague, or, in the words of Koch, are the measures we are empowered to take against it "most accurately adapted to its special nature, to its etiology? It is a great blunder to treat pestilence uniformly."

Syphilitic and Tuberculosis Lesions of the Blood Vessels.

Finkelnbvrg in Philadelphia Medical Journal, reports the case of a man many of whose ancestors and immediate relations had died of tuberculosis. He acquired at the age of 42, a hard chancre, was extremely depressed about it, and 3 months later developed left-sided hemiplegia, after some prodromal symptoms that indicated involvement of the brain. Two months later he had a severe headache that yielded to specific treatment. A year afrer the infection and six months after the first symptoms he developed right-sided hemiplegia, followed by symptoms of paralysis of the vagus and death- At the autopsy in addition to a catarrhal pneumonia of both lower lobes there were found extensive changes in the arteries and veins of the central nervous system and its meninges, characteristized by thickening of the interna, and round cell infiltration of the pia in the base of the brain and in the region of the right frontal lobe, and in the spinal cord. There were also inflammatory changes about the nerves at the base of the brain and abont the roots of the cord, and finally an area of softening in the lenticular nucleus and in the pons. The difficulty in this case consisted in the discrimination between syphilitic and tuberculous lesions of the blood vessels. Arterial sclerosis is excluded on account of of the age of the patient. However, the clinical course of the disease is strongly in favor of syphilis, and as all the symptoms could be explained by the lesions found; Finkelnburg concludes that the process probably was syphilitic in nature.

Pathological Forms of Drunkenness.

Heilbronner, in the Philadelphia Medical Journal, concludes his article upon the pathological forms of drunkenness. Among the important predisposing causes are injuries to the head. In other cases no predisposing conditions can be detected. When more than one attack occurs in the same individual, the symptoms of the second usually resemble those of the first. Another frequent cause is sexual excess. The diagnosis is usually easy, a state of confusion, excessive motor unrest, and other characteristic changes being present. For the differential diagnosis, from profound drunkenness may be utilized the fact that in the latter state the patients usually fall asleep at once, and in the pathological conditions it is very difficult to get them to sleep at all. The degree of amnesia that follows is very variable; usually it is complete, but not invariably so, and it is also noteworthy that amnesia may follow ordinary states of drunkenness or even epileptic attacks. Probably the most difficult differential diagnosis is from the various aberrant forms of epilepsy. The greatest importance attaches to this condition on account of the medico-legal element that many of them contain.

The Value of Calcium Carbide in the Treatment of Inoperable Carcinoma of the Uterus.

The treatment of carcinoma by calcum corbide dates from 1896. Concerning this method of treatment I. C. Chase, in the Texas Medical Gazette, closes an article with the following resume of important conclusions:

The mass of literature on this subject is misleading.

The originators of the treatment were ignorant of the real rction of calcium carbide. and had insufficient clinical experience to pass judgment on its value.

Acetylene has no effect on protoplasm sufficient to support a theory of any specific action on carcinomatous cells.

Acetylene has on escharotic effect.

Acetylene has no bactericidal action upon pathogenic bacteria or the bacteria of putrefaction.

The principal action of calcium barbide results from liberated quick lime.

Lime is not a rational caustic to select if one is desired because of its superficial action, the character of the necrosis and tendency to promote hemorrhage. The metallic salts are more styptic, and their action may be better grakuated by proper selection.

The amount of heat evolved may be sufficient to slightly cauterize the tissues. In most cases it has slight therapeutic effect save counteracting the tencency to hemorrhage and promoting contraction.

The heat of the actual cautery promises

better results because of the firmer cicatrices, resisting carcinomatous invasion and more complete contraction of the wound.

Calcium carbide is open to the same dangers of other caustics when improperly or too zealously applied, those of producing its corrosive action in the wrong place, fistulae, perforation and fatal peritionitis or occlusion of the uterus.

The treatment does not reduce odor or hemorrhage nor give more comfort to the patients than other rational lines of treatment.

The claims of advocates have not been realized in experience. There is no evidence in theory or practice warranting the conclusion that calcium barbide could ever cure a case of really inoperable cancer of the uterus.

The facts regarding the subject should be more widely disseminated to expurgate medical literature and to avoid false expectations and fatal delays in operable cases.

The Treatment of Carcinoma of the Lower Lip.

Cancer of the lower lip is a very common growth. It is far more common among men than among women. It is particularly common in men whose work forces them to be exposed to all the inclemences of the weather. Smoking is also an exciting cause. John Chalmers DaCosta, in Indian Lancet, says:

The important injunctions to be inculcated regarding the surgery of cancer of the lip: extirpate every sore which does not heal, particularly if it has a hard edge; operate as early as possible after cancer begins; operate radically; and always remove the anatomically-related lymph glands and the submaxillary glands.

Spinal Cocainization.

Morton mentions the fact that he has, in Journal of American Medical Association, operated on a large number of cases by spinal cocainizations and has collected reports of cases from other physicians. He thinks there can be little doubt as to the advantage of the method in cases where general anesthesia is contra-indicated on account of cardiac or renal disease. Since reporting the above cases he has had made 61 more operations by this method, 15 of which were operations on the upper extremities or head with complete analgesia.

Tretment of the Eustachian Tube by Means of the Electro Bougie.

Concerning this subject and after careful study and observation Thos. J. Harris, in the New York Medical Journal, says he feels waranted in offering the following conclusions:

The electro-bougie has a place in our aural therapy—though a less important one than was at first supposed.

It should be used after, and not before, other methods of treatment.

It will be most liable to fail if any associated internal ear disease is present.

Its results are not always permanent—the stricture may reform—we may hope rather for a diminution than a disappearance of the tinnitus.

Two cases totally relieved out of 25.

Two cases partially relieved.

Its use is not without danger—and a proper knowledge of the anatomy of the parts and of the technique is essential

It is a question whether the process is a true electrolytc one, or if in many instances the obstruction is a true fibrous stricture.

Trauma as an Exciting Cause of Paralysis Agitans.

As regards trauma as an exciting cause of paralysis agitans, F. Savary Pearce, in the Philadelphia Medical Journal, is of the opinion that the later the origin of the disease is trauma more apt to have been the exciting cause; in any event, it is more apt to produce an aberrant type of the malady, especially when the insult to the nervous system has been primarily in the periphery of the body rather than of the central neurons.

The Woman of the Tenement and Her three Great Enemies, Ignorance, Alcoholism and Tuberculosis.

There are two main causes for the propogation of tuberculosis in treatments writes S. A. Knopp in Journal of Medicine and Science.

There are two main causes for the propagation of tuberculosis in the tenements. First, the frequent presence of one or several tuberculous patients in tenement houses. Secondly, the unsanitary condition of the houses themselves. As to the prevalence of this disease in the tenement districts permit me to quote a few lines from a little address I delivered on the subject of "Tenements and Tuberculosis" last year at a conference held at the tenement house exhibition: "If I should be asked what conditions are most conducive to the propagation of tuberculosis and especially pulmonary consumption, I would have to reply, the conditions that prevail in the old-fashioned tenement houses as they still exist by the thousand in this and other large cities. In these tenements there are not only a far greater number of consumptives than in the

same area elsewhere, but the proportion is actually greater per number of inhabitants. Thus they not only contain countless centers of infection for old and young, and multiple foci for reinfection for those already afflicted, but thesed wellings with their bad air, darkness and filth make a cure of the disease impossible, and a lingering death for all of those infected by the germ of tuberculosir a certainty. If anyone thinks me an alamist, let him glance at the charts prepared by the tenement house comission. There he will see that there are houses in which can be counted as many as twenty consecutive cases of tuberculosis during the last four years. This number represents, however, only the cases reported to the board of health. Now, you must not think for a moment that these are the actual number of cases of tuberculosis existing in that particular tenement. They are only the ones where the disease had so far advanced that medical aid became imperative, a physician had to be called in, and the case was reported. But how many of the moderately advanced ca es are made known to either physician or board of health? I venture to say those not reported are more numerous than the reported ones. They constitute that class of pulmonary invalids who are still able to work and who imagine themselves to be suffering only from chronic bronchitis, and the equally large number of children suffering from tuberculous manifestations other than pulmonary. To the uninitated it may sound like a paradox when I say that the tuberculous invalid who is still up ahd about, perhaps supporting his family, is often the greatest danger to the commukity, to his friends, his neighbors, and to those who may succeed him in the tenement he lives in, It is this class of consumptives which, from either ignorance or carelessness, spread their disease broadcast by depositing their infectious sputum everywhere without any regard to the danger."

Slow Pulse With Special Reference to Stokes.

The treatment of permanent slow pulse writes Robt. L. Edes, in Philadelphia Medical Journal, consists in rest which is to be never or less complete according to the special case, from the most absolute upward.

Diet, tonics and such regulated exercises as have been found beneficial in other forms of heart disease. Cardiac tonics have been found of some value, although there is no specific. The nitrites have been favorably mentioned in some cases. Digitalis, the beneficial action of which in most cases of heart disease, consists in its slowing the pulse, has in a few cases resulted in quickening that which is already too slow, an action which it is not difficult to understand when we recollect that the tonic action of this drug consists not only in increasing the activity of the pneumogastric and the vaso motors, but to a certain extent that of the augmentors also. In these cases it may happen that the balance is so adjusted that the latter effect outweighs the former.

Belladonna has proved a distinct failure for the treatment of the permanent slow pulse.

The prophylaxis of the paroxysm consists in carefully adjusting the load to the weakened muscular system that has to carry it, and in avoiding the causes of exciting the reflex activity of the vagus, in particular, muscular strain and digestive disturbance. The bromide of potassium has been suggested on theoretic grounds to diminish reflex activity.

In the developed paroxysm cardiac stimulants like ammonia and the nitrites, are to be used, and especially atropine, which should be given subcutaneously in the dose of one or two milligrams. It has been remarked that the cases are not numerous in which the action of atrpine given in efficient quantities has been carefully watched. In the case of Kinkead, it seems to have acted as it should do theoretically, and also in the case of Claybaugh, relieved the earlier paroxysms. The recumbent posture of course favors the return of blood to the brain. One of Stokes' patients found that he could ward off the fits by getting on his hands and knees and allowing his head to hang down.

Local Anesthesia Without Risk of Danger.

Rasely (Therapeutic Gazette) has found chloretone equally as good as cocaine in operative cases, including the incision of abscesses, amputation of fingers, and even in the extraction of teeth, without the least evidence of a depressing effect.

He has operated on a case of complete fistula in a man seventy-four years of age, with fatty degeneration of the heart, using chloretone as the anesthetic for several reasons. No pain was felt, and there was the slightest manifestation of depression or exhilaration, although syringeful after syringeful of the saturated aqueous solution was used in the line of the proposed incision.

Rasely thinks chloretone an ideal local anesthetic, and he believes it to be sure in effect and safe in result. He thinks it is well adapted to take the place of cocaine in subarachnoid anesthesia.

The Treatment of Infantile Diarrhoea.

Rabey, in American Medicine, summmarizes the treatment of this affection in the following general rules:

(*a*) Cleanse the bowel of the bacteria and their toxic producti. (*b*) give the remaining bacteria as unfavorable conditions as possible for further production. (*c*) Soothe the irritated intestine where the continuance of the condition makes this necessary. (*d*) Support the patient against constitutional symptoms, as fever, nervous irritability, ect., as in other acute diseases of childhood. (*e*) Guard against infection of others by isolation when possible and by carefully washing the hands after handling the stools in order not to infect other food and common household articles.

The Relations of Bodily Mutilations to Longevity.

John Homans, writing from the standpoint of life insurance, in The Medical Record, says that injuries to the skull, with loss of substance, prevent the applicant from being a good risk; without loss of substance, and with no symptoms, he would be as good a risk as any one. Loss of sight from injury is no bar, but those whose eyes have been removed for carcinmatous or sarcomatous growth are usually short lived. Loss of limbs is apt to induce mental depression and a resort to alcohol and morphine. Persons whose stomach, spleen, liver, or kidneys have been interferred with surgically or by accident, do not promise a longevity which would justify their insurance. Those who have suffered removal of a small portion of the intestines for injuries or gangrenous hernia, or of the appendix, have a good chance of living to be old. Women who have had ovariotomy or hysterectomy performed are apt to be long-lived as the healthy. After herectomy performed for fibroid tumors, however, the probability of longevity is good. By careful selection many mutilated persons might be picked out who would be good subjects for life insurance.

Post-Operative Sequelæ and Conservative Gynecology.

The history of gynecology is but a repetition of many another department of general surgery. Frank K. Oastler, writes an article for The American Journal of Obstetrics in which he emphasizes as far as possible the many disagreeable features of the artificial menopause, in the hope that the attention of physicians may be attracted toward the more conservative method of gynecological surgery. In concluding this most excellent article, he says:

(1) That the symptoms of the artificial menopause occur with more regularity, greater severity, and are of longer duration than is generally supposed, some women being left invalids; (2) that the symptoms are dependent for the most part on the removal of the ovaries rather than the uterus, therefore, if supravaginal hysterectomy can be performed, there is no indication for leaving the uterus; (3) that many of the cases in which it has been customary to advise hysterectomy can be treated in the future by the more conservative methods which have been mentioned; (4) that conservative methods do away with the artificial menopause, relieve symptoms, and allow the patients to continue their sexual life with a possibility of future pregnancy.

Treatment of Erysipelas with Carbolic Acid.

N. S. Fraser mentions a case, in The New York Lancet, where an erysipelatous inflammation extending down the arm and up to the anterior fold of the axilla was immediately checked by painting around the arm at the upper limit with pure carbolic acid and when the tissue become white the same was painted with absolute alcohol. This is a very simple remedy and we trust it will hold good in every case.

The Leading Editorials of the Month.

The Unsolved Problems ef Tuberculosis.

The great questions, how to prevent and how to cure tuberculosis are still agitating the leading mind of the leading men in the medical profession. An editorial on this subject is found in the Journal of American Medical Association as follows:

The echoes of the recent British Congress on Tuberculosis are likely to be heard for some and the one pre-eminent question raised by Koch's address is not likely to be downed until some authorative dictum based on conclusive research has been given out. It may be that as a profession we have not taken exactly a scientific position heretofore on this matter; we have accepted inconclusive evidence as final, and have been guided in our opinions more by the sense of expediency than by the careful weighing of facts. If this is true Professor Koch has done the profession a service by raising the issue definitely and clearly. The fact that the majority of authorities are against him is perhaps a fortunate one as it will insure a more thorough study on their part to find data to support the theory so rudely shaken by his authority.

The investigation, however, is not a sim-

ple one, not so much so indeed as Professor Koch would seem to believe. It is not a self-evident *a priori* fact that cultures of tubercular leisons in the human subject derived from tubercular meat or milk will still present the characteristics of bovine tuberculosis. If this could be definitely accepted as true the matter would be easy. But the fact is there will be objectors to this acceptance who will require demonstration that the organism does not become modified according to its environment, and with our present lack of knowledge of the biologic qualities of the tubercle bacillus in all its varieties there seems to be a very wide field for investigation and infinite puzzling possibilities. On the other hand, it does not follow that latent human tuberculosis or its almost ubicuitous tuberculous germs may not be aroused into malignant activity by the inoculation of animal tuberculous toxins, or that a possibility of transmission of bovine tuberculosis to man by inoculation proves that it is also transmissible by introduction into the unwounded digestive tract. As one of the foreign delegates is reported to have said in the Congress, the inoculation of man from animals is a different thing from infection by the way of the ailmentary tract. There may, moreover, be differences in the development and virulence of the tubercle bacillus in different parts of the organism to still further complicate the question. There is still another factor with which to reckon, and that is the universal distribution of the germs of human tuberculosis which renders impure almost every possible experiment in this line. We cannot well exclude the possibility of other sources of infection in any alleged case of transmission of animal tuberculosis of mankind.

It would seem that after all the study will be largely confined to the lines already followed by Koch, viz., clinical and post-mortem observation. There are, however, many suggestive side-lines, and there is a wide range of possibly useful facts in the enlargement of ours at present imperfect knowledge of the natural history of the microbe and its closely allied forms. The study of human resistance and immunity is also promising; it may come finally to the problem of just how much microbic invasion the average organism can stand under different conditions. We may find the danger of bovine tubercle a minimal one, and yet have to decide how far we are justified in neglecting it, and whether it can be differentiated in any case from that due to numerous other sources of infection that are ever about us. In the meantime we will do wisely to keep on the safe side, avoiding, however, the tendencies to exaggeration and unwarrantedly positive statements that have existed in the rather recent past. If Koch has excited a healthy scientific skepticism to stimulate research and replace the self-satisfied assurance of positive knowledge on a subject in regard to which there is yet so much unsettled, his utterances will have done an infinite amount of good.

The Physician as a Legislator: A Suggestion

If one will stop to consider how few states are ever represented by physicians in their Legislature polls they will be amazed. We heartily concur with the Boston Medical and Surgical Journal in this editorial:

From the moment when he enters upon a course of professional training for a medical education to the close of life, the medical man, perhaps more than any other, is disinclined to enter upon the field of politics, anh consevuently the Ltate legislature, as well as the halls of Congress, rarely prove an attractive field for physicians. This fact is more evident at the present day than at any time before, and while it may be undoubtedly redounded to his credit as a proof of the quality of "sticking" to his profession, and of departing from its training and practice neither to the right nor to the left, it is also true that those few physicians who have been elected to the legislature in the past have usually proved to be extremely useful legislators. It is doubtful if several of our most noted medical laws, such as the Medical Registration act, the Food and Drug acts, the acts relating to poisons, to contagious diseases and others of like character would have been enacted, if it had not been for the presence of active, intelligent and practical physicians in the legislature, who could urge the importance of these laws, explain their usefulness, and meet the objections which were sure to be argued against them.

A few years since there were seven physicians in the legislature of Massachusetts at one year's session, and as consequence several important medical laws were enacted; but the number has gradually diminished, until, at the last session, the, profession was not represented by a single physician.

It has always been a commendable custom to place one or more physicians upon the Committe on Public Health, but in their absence this important committe must be composed of druggists, plumbers, undertakers and others whose interests are usually devoted to minor topics and not to the weightier medical queetions which concern the public health and welfare. The need of

sound medical advisers upon such a committee is always apparent.

Of other professions and occupations there is usually an abundant representation. Lawyers by the score may always be counted upon to fill the legislative seats, so also with other occupations. In the New England Grocer of June 28' the editor presents sketches of sixteen grocers who were members of the legislature of 1901, and takes just pride in stating that these were "men of stamina and ability, earnest, forceful, progressive men." He adds: "It may be there are one or two others."

As a result, several prominent matters of importance to men of this occupation were introduced in this session, and at least two measures, these relating to the proper labeling of articles of food and to the one of preservative substance, went through the necessary stages of debate and became laws-

It is to be hoped in the coming session, for the good of the profession as well as of the community at large, that medicine as well as law, education and agriculture, may have at least one or more worth defenders upon Beacon Hill.

An Important Ruling Concerning a Physicians Fees.

Physicians fees are getting to figure quite extensivily in court proceedings. An editorial in the New York Medical Journal says:

A very important ruling was made by Judge Armstron, at Camden N. J., on August 2d. Dr. Godfrey, who had attended a woman for four years, put in his claim as a preferred creditor for $394 against her estate, after her decease. It appears that the patient had been suffering from Bright's disease and, while under Dr. Godfrey's care, had been recommended by him to go to Bedford Springs, where she died. While she was there, another physician attended her. The claim was made by the defendant estate that, not Dr. Godfrey, but this other physician, who was called in at the last, attended the patient in her last illness, and that, therefore, Dr Godfrey had no *locus standi* as a preferred creditor. In this point of view the court, very properly as it seems to us, declined to concur, but ruled, on the contrary, that Dr. Godfrey did attend the woman in her last illness. It seems to us to be clear that as the attendance was continuous over the period of the illness which ended fatally, until the patient, at Dr. Godfrey's advice, went to Bedford Springs; her being there was in fact part of the treatment prescribed by him; and, unless it could be shown that the patient had actually dismissed him after going there, it must reasonably be assumed that she continued to carry out his treatment in general, notwithstanding the presence of another physician, whose attendance should be regarded in the light of auxiliary aid in an emergency, much as would be the case were the nearest physician summoned, say, in an attack of hæmoptysis, when the doctor under whose continued care a tuberculous patient was, did not happen to be at home. Surley both physicians in such a case would be properly held to have benn in attendance during the last illness.

Kansas Physicians Recommend a Hot Weather Hospital.

Kansas City Physicians recommend the erection of a hot weather hospital. In such an institution the air would be cooled artificially and the hospital could be built near one of the ice plants, with pipes through which refrigerated air could be pumped into the rooms of the building. It is agreed that deaths are caused every day by the intense heat that are not reported as heat prostrations. The temperrature in the average hospital ward is enough to double the sufferings of a patient. By the use of cold air the wards of a hot weather hospital could be kept at the same temperature day and night. There would be fewer deaths and much less suffering were these conditions made possible. The idea will probably be seriously considered by those interested in the care of the sick.—New York Medical Journal. (A good idea.)

The Vertebral Canal as a Route of Medication.

The Vertebral Canal is coming to be quite a prominent avenue in the administration of medicine. Concerning it as a route for medication the New York Medical Journal says editorially:

It not infrequently happens that novel procedure leads to substannial advance even when of itself it proves unsatisfactory. This may turn out to be the case with anæsthetization by endomeningeal spinal cocainization. Some recent reports tend to show that epimeningeal medication —that is, the application of drugs in the space between the vertebræ and the dura mater, commonly called "epidural" medication—may prove effective in the treatment of certain morbid conditions. At a recent

meeeting of the Medical Society of the Hospitals, of Paris (*Press medicale*, July 3d), M. Souques reported a case of sciatica of five months' standing, in a woman sixty-four years old, in which twy injections of about a third of a grain of cocaine were administered. After the first injection there was immediate relief, but it was only tarnsitory; after the second there was the same instantaneous relief, and it was then permanent so far as could be inferred from the fact thet up to the time of the report, a period of five weeks, the pain had not returned.

It seems that the applicability of this mode of medication is not restricted to painful affections, and that it may perhaps be employed to advantage for the introduction of other drugs besides analgetics. M. Mauclaire recently reported to the Paris Society of Biology (Gazette hebdomadaire de medecine et de chirurgie, July 11th) ou his employment of iodoform injections in the treatment of certain forms of Pott's disease, namely, those characterized by lesions of the bony wall of the rhachidian canal or by tuberculous pachymeningitis of the dura mater. The introduction of the needle into the sacral canal is easy, says M. Mauclaire, in any posture of the patient, and he has found by experiments on the dead bodies of children that by throwing iodoformized glycerin in very slowly it may be made to penetrate as far as the upper dorsal region. In his trials upon the living subject he has generally used a saturated solution of iodoform in liquid vaseline, prepared with the utmost regard to asepsis. The injections may be administered once in two weeks, and the author thinks that larger amounts than he has thus far employed will be found perfectly safe.

He first injected about a drachm and a half of iodoformized glycerin in the case of a man affected with angular curvature in the lower dorsal region. A little pain of brief duration followed, but there was no unpleasant after-effect. He then tried the procedure on three children having Pott's disease in the lumbar or the lower dorsal region, injecting from half a drachm to a drachm of iodoformized oil. In one of the children there was a slight elevation of the temperature for two evenings after the injection. He is convinced that these injections, employed with due precaution, are quite harmless, but as to their utility, he can at present only say that it seems probable. At all events, he looks upon this method of treatment as only an adjuvant to Sayre's plan of immobilization with the plaster jacket.

The Uses and Abuses of Arsenic,

There appears the following editorial in the Therapeutic Gazette:

Many practitioners who do not see much of skin diseases seem to have an idea that arsenic is a remedy which can be administered in almost every lesion of the skin with advantage, and fail to recognize that as a rule it is contraindicated whenever the layers of the skin are inflamed; being on the other hand, most useful when the epiderm is dry and improperly nourished. As a result of the constant employment of arsenic in many instances in which it ought not to be used we sometimes see cases in which distinct damage is done by its too free administration. It is also to be remembered that the drug in larger doses is capable of producing some renal irritation of the mucous membranes of the body in general is sometimes a contraindication to its use. Our attention has been called to this important subject by a paper recently contributed to Treatment by Dr. Rolleston, who states, under the heading of "The Good Effects of Arsenic," that it is a valuable appetizer or pick-me-up, in the dose of minim of Fowler's solntion with ten grains of bicarbonate of sodium and infusion of gentian taken before meals: that it is also useful in certain forms of morning diarrhea and nausea; and its value in the treatment of various forms of anemia is very great indeed. So, too, the local use of an arsenical paste as an escharotic is being revived with considerable enthusiasm, a mixture of arsenic 1 part, with alcohol 50 parts and water 150 parts, being applied to the growth. It is hardly necessary to remind our readers of the practical specific influence of this drug in the treatment of chorea, and its value as a blood tonic in malaria, in diabetes, and in asthma, it being held by Murray and others that it is useful particularly in those asthmatic cases which are young, and in those which are old with marked emphysema. It is also valuable in those cases which seem to have nasal disorder due to hyperemia of the respiratory mucous membrane.

While recognizing the value of arsenic, we must not forget that it is possible for it to produce evil influences, and that it is capable when administered too long a time in large doses of causing pigmentation of the skin, irritation of the stomach and of the respiratory tract, and more serious still, peripheral neuritis, which not only ensues after the ingestion of this drug but also after its too free use in large doses in the treatment of chorea. Rolleston also tells us that large doses of this drug may also cause herpes zoster, and in the recent widespread epidemic of arsenical neuritis ob-

served in and around Manchester, England, various erythematous eruptions, resembling scarlet fever or measles, with considerable itching, appeared, and these lesions were sometimes followed by pigmentation. Cases are also reported by Jonathan Hutchinson and Hamburger, in which ascites has developed in patients after the long-continued medicinal use of arsenic. In Hutchinson's case the abdomen was tapped three times, and it is possible that the ascites was really due to early cirrhosis. Reynolds and Sturrock are quoted by Rolleston as asserting that cirrhosis of the liver with ascites has been observed much more frequently during the epidemic around Manchester than before.

The Importance of Note-taking.

The value of note-taking cannot be estimated. It seems a trevial thing, but when we come to think about it nearly all of our leading physicians and surgeons have been careful note-takers. Commenting upon this American Medicine says editorially:

The importance of note-taking is not generally apdreciated by practitioners of medicine and surgery. Careful notes on cases lead to more careful observation of cases and hence to a more thorough understanding of them. Most of the leaders in our profession have been careful note-takers, and no doubt the accuracy of observations which this habit tends to develop has been, to a considerable degree, responsible for their success.

Among the writers of eminence who have emphasized the importance of careful note-taking is Sir Benjamin Brodie. His ideas on this subject, as well as on many others, are still well worth reading. In an introductory lecture at St. George's Hospital, London, October 1, 1838, Brodie expressed himself as follows: "It is not by going through the form of walking round the wards daily with the physician and surgeon that you will be enabled to avail yourselves of the opportunities of obtaining knowledge, which the hospital affords. You should investigate cases for yourselves; you should converse on them with each other; you should take written notes of them in the morning, which you may transcribe in the evening, and in doing so you should make even what are regarded as the more trifling cases the subject of reflection. Some individuals are more, others less, endowed by nature with the power of reflection; but there is none in whom the faculty may not be improved by exercise, and whoever neglects it is unfitted for the medical profession. You will be at once sensible of the great advantage arising from your written notes of cases. But that advantage is not limited to the period of your education. Hereafter, when these faithful records of your experience have accumulated, you will find them to be an important help in your practice."

But the benefit should not be alone for the one who takes the notes, for cases of special interest should be reported for the benefit of others and satisfactory reports are impossible without note-taking. We know a number of men of ability and wide experience who report cases and omit the most important details, such as the age of the patient, the duration of the illness, etc., well-known surgeons who report about 100 operations or the excision of tumors weighing about ten pounds. Such slipshod reports are usually from the lack of careful observations and records, and they lose most of their value from lack of accuracy. Our own memories are so inaccurate that we feel a little uncertain as to the reliability of the report made from memory, months or years after the case was under observation.

To make satisfactory notes when crowded with other duties and tired, requires will power in the start, but when once the habit is formed, the work soon becomes less laborious. Brevity of statement, the omission of all useless details, and a good system of abbreviations will lighten the work. It should always be remembered that a record taken on the spot at the time of the observation is much more likely to be accurate and less likely to be forgotten.

Careful notes on cases are specially desirable in hospitals where the wealth of material is great, but it is a lamentable fact that accarate history-taking is not common, and perhaps there are not a dozen hospitals in the United States in which the histories have been so carefully tanen and put in such form as to be of much service for those who might wish to make use of them. All those in any influential in the management of such institutions should at once take steps to see that this state of affairs is remedied.

Prophylaxis of Child Labor.

There is no question that now occupies the attention of the medical profession as that of tnberculosis. In the Medical News the following editorial appears.

The medical profession has taken as its serious task for the twentieth century the eradication of tuberculosis. Needless to say, the success of the antituberculous campaign depends to a large extent on the health and strength of the children of the generation, their protection from oppor-

tunities of infection, and their careful treatment in an early stage if the disease is acquired. This feature of the tuberculosis movement, so prominent throughout the medical world, has been more neglected in America than have other phases of this great humanitarian advance. Children with beginning tuberculosis of the lungs or even with well-developed scrofulous tendencies need care in country homes and sanatoria more than any other class of cases. If the pulmonory symptoms are at all prominent, however, there is a well-grounded objection to the reception of such children among other child patients.

As yet the tuberculosis sanatorium movement has not progressed to the point in this country where special institutions of this kind for children can be looked for. The need for them is evident. The battle with tuberculosis among the adult population will prove indecisive until the great source of recruits to the ranks of the tuberculosis that constantly exists in neglected children, can be completely cut off. In Europe, especially in Germany and France, this necessity for special care of exposed and predisposed children has been recognized. In the neighborhood of Paris there are two special institutions for the care of tuberculous children; one with 120 beds for the bare of patients between three and twelve years of age; the other with nearly 250 beds for children from two to sixteen years of age. The accommodations for patients are, of course, very limitad for the needs of the immense French capital, but even this unsatisfactory arrangement represents a distinct advance from the almost complete neglect of tuberculous children a few years ago. A feature of the French children's sanatoria is the existence of two ancilary institutions in the country in which after they are pronounced cured, children may remain for some time until their health is well established, light work being provided in the meantime by which they may aid in their own maintenance. This feature is almost ideal in its thoughtfulness and prevision and must be most effective in preventing early relapses.

Until private charity and public interest have led to the establishment of similar institutions in this country, all our efforts must be concentrated on the prophylaxis of tuberculosis in the young. The report of the German Central Committee for the Suppression of Tuberculosis points out that the most effective means we have at present for the prevention of child tuberculosis is the care of the health of city children, especially during the summer. As the result of their insanitary surroundings, and because of their low resistive vitality during the developmental period, young children are especially liable to offer a favorable soil for the successful inoculation of the tubercle bacillus. This adds greatly to the amount of tuberculosis present in tenement house districts. It is from these overcrowded quarters of the city that tuberculosis is carried to the residence districts of the well-to-do classes. Summer outings for poor city children are therefore not only a commendable public charity, but also a distinct means of lessening the death-rate from tuberculous. The German Central Committee is able in its recent report to show that cities where summer outings for children are encouraged have a distinctly lowered death-rate from tuberculosis.

Two special precautions with regard to the development of child tuberculosis have been particularly insisted on in recent years. One is the additional care needed for children who have suffered from either measles or from any forms of pleurisy, especially if they are of delicate constitution. French authorities maintain that pulmonary tuberculosis seldom develops in children, except in cases where there has been a preceding attack of measles and that in some way this exanthem very favorably influences the tissue soil for the reception of the tubercle bacillus. It is now known, of course, that most pleurisy of obscure origin is really due to latent tuberculosis. Even where some other germ is at work the lowered vitality of the lungs invites the development of tuberculosis.

With regard to the influence of the diet of children on the development of tuberculosis two interesting facts in comparative pathylogy seem worthy of special notice. It is now definitely settled as the result of careful investigations at the Pasteur Institute that avian and human tuberculosis are but modified forms of the same disease. Fewer birds than has been thought die of tuberculosis. The majority of bird victims of the disease occurs in those species that live on grain. Among the meat-eating birds only those that have consumed the flesh of tuberculosis animals suffer from the disease. The application of these observations to human pathology is obvious. Children must not be allowed to live on a too-exclusively vegetable diet. Milk must form the important part of their diet. Milk must form the important part of their diet until they became meat-eaters to a considerable extent. In the meantime every precaution possible must be taken to avoid the use of milk contaminated by tubercle bacilli.

The Substitution and Adulteration of Drugs

The subject of substitution and adulteration of drug is clearly and plainly discussed editorially in the Philadelphia Medical Journal and a good remedy offered for its correction.

The greed for gain is strongly developed in most modern business methods. Competition, perhaps, is responsible to some extent, as it is likely to reduce profit. This often leads dishonest individuals to substitute and adulteraie the products of merchandise which they have for sale, so as to meet competition and still make a fair or even large profit. While this practice is confined to merchandise and materials which are not used as food or as medicine, the practice is simply dishonest, but when the methods of substitution and adulteration are applied to food and drugs the practice in addition becomes dangerous. We are concerned here mainly with the substitution and adulteration of drugs, and it is our intention not only to call attention to the fact that such a practice exists, being carried almost to an alarming extent, but also to suggest a remedy which will partly control and perhaps entirely stop the pernicious practice among pharmacists and manufacturers of drugs and chemicals with which we, as physicians, are mostly concerned. We remember an instance which occurred in Philadelphia in which a celebrated chemist had procured quite a large number of samples of laudanum from local druggists, and found the great majority of them to be belowthe pharmacopeal strength. Under such circumstances what physician can be certain of the dosage of tinctures and extracts which he ordees in his prescriptions? Where proprietary remedies have been ordered in the original package, the package has in many instances been opened and cheaper and inferior substitutes been added. What dhysician does not know of this harmful and dangerous practice, yet what has been done by the profession to put a stop to it? Very little, if anything. If a physician sends patients to a pharmacists whom he knows to be honest (and unquestionably there are many conscientious and honest pharmacists), it is soon said that "the doctor gets a percentage on every prescription which he sends there." Even this is sometimes true, we are sorry to admit. The original package is not practical for prescription writing. But there is a remedy. Whenever a physician has his attention called to tha fact that a prescription has been adulterated, that inferior drugs or substitutes have been used, the druggist should be reported to the County Medical Society or other local organizations, so ihat all physicians may know of it and see to it that their prescriptions do not go to such a pharmacist. This is honest ostracism, and will compel perhaps involuntary honesty.

The Relation of Alcoholism to Tuberculosis.

T. N. Kelynack says in Medical Record, that three views of this subject are possible: (1) That alcoholism is antagonistic to tuberculosis; (2) that alcoholism bears no special relationship to tuberculosis; and (3) that alcoholism definitely predisposes to tuberculosis. The author reviews the opinion of various authorities in regard to these three views. In his own hospital work he has for years analayzed and observed cases bearing on thss subject. Eight fatal cases of peripheral neuritis occurring in alcoholics were subjected to pathological examination, and pulmonary tuberculosis was found in seven. In the recent outbreak of arsenical neuritis in Manchester, which occurred principally in alcoholics among the poorer classes, in many of the fatal cases there was pulmonary tuberculosis. Tuberculosis is also of frequent occurrence in the subjects of alcoholic cirrhosis of the liver. Out of 121 cases of common cirrhosis, tuberculosis was present in twenty-eight.

The Value of a More Accurate Diagnosis in the Cases of the Deaf and Dumb.

Editorially in American Medicine we find this subject considered as follows;

A very interesting report of the investigations of Prof. E. Schmieglow, of Copenhagen, has recently been published. He has tested the ability to hear of 185 deaf and dumb Danish children. At least 19 showed symptoms of internal ear disease which had never been treated, either otorrhea, polypus etc.; 30% of the total number were perfectly deaf, 70% could hear slightly, but a varying amount. In 12.5% of the cases was the tone-perception limited to at most 2½ octaves, which octaves were the middle ones of the scale, but the tones were perceived for so short a time that it was impossible to distinguish a vowel from a consonant or a word. In 17% of the cases the normal scale of musical tones was broken by gaps, in which the tones could not be heard. There thus remained larger or smaller tone-series fhe notes of which could be so long heard that ability existed to distinguish several vowels, but only in isolated cases could consonants or words be recognized. The third group, 1.4% of the cases, could hear none of the upper part of the scale, while the lower hotes were heard normally or quite so. In 8.7% could neither the upper nor the lower part of the

scale be heard, In 4.3% is there least ability to hear lower tones. In the sixth group, 15%, is on the contrary, greatest ability to recognize higher tones. The last group of cases, 4.3%, could hear all tones of the scale which is normally heard, but the tones were heard for a much briefer interval, hence preventing proper perception. Finally, 64 in 100 deaf and dumb children, can heaa tones, 51 can hear the human voice, but only 24 can recognize vowels. These observafions show the value of testing the hearing ability of a deaf and dumb child to determine whether he is better adapted for acoustic or visual instruction. The number of cases with untreated long-standing disease, which may be to blame for the deafness. shows the indifference with which such diseases are considered.

The Future of Medical Practice.

According to the New York Medical Journal: A few years ago a young woman came to New York to dursue a course of study which would oblige her to stay here most of the time for rather a long period. Being a prudent person, she sought to insure her happiness as much as possible during her sojourn in a strange place; with this end in view, she asked her family physician for advice as to whom she should have recourse to in case of illness. He gave her the names of a number of eminent specialists, but not that of a single general practitioner. Shortly after the girl arrived, when she had made a few acquaintances, she said to one of them: "My doctor has recommended a number of specialists to me, so that I know whom to go to if there's anything the matter with my eyes, with my skin, with my throat, with my nose, and so on, but the question I should like to have answered is, Whom shall I call in when I'm sick?"

This little tale represents rather accurately the perplexity into which the growth of specialism has cast many members of the community, but there is another side to the matter, that, namely, which involves the question or what is to become of the general dractitioner. This problem has been discussed not a little, but by nobody so well, it strikes us, as by Dr. George E. Francis, of Worcester, in his recent annual discourse before the Massachusetts Medical Society, entitled Medical Prospects. Dr. Francis is no pessimist, but while, like all the rest of us, he appreciates the work of the specialist in advancing medicine as a whole, he clearly recognizes the peril of the family doctor from the florid development of specialism—peril both from the educational point of view and from that of making a living. In the medical schools, he says, the division of the curriculum is constantly growing more and more minute; every endeavor is made by each instructor to render his own field so interesting in itself that, in the plenitude of attractive subjects of study, few of the students are likely to bear in mind that the maiu object of the study of medicine is not the microscopic investigation of some or all of the component parts, but that study of the separate departments is preliminary and subsidiary to that of medicine as a whole and to that of a man as a whole. "Medicine," he continues, "viewed as a science or as an art, is something far higher than a patchwork of its separate departments, precisely as man is far more than the joining together of a certain number of organs." It is, therefore, to be regretted that the increasing numerical predonderance in the teaching staff of specialists over men trained to view things broadly is making it every year more nearly impossible to so educate the student and so stock him with knowledge as to fit him for the general practice of medicine.

Dr. Francis takes a new view of the proposition that a student who intends to become a specialist ultimately should first spend some years in general practice; at least he sheds a new light on it. He admitf its excellence from the theoretical point of view, but he throws great doubt upon its general practicability. The point he makes is this: An absolute wall divides specialism from general practice. Over that well nobody can climb gradually; if he is to pass it all, he must vault over it. In other words, if a man in general practice attemps to glide slowly into a specialty, his fellow-practitioners will at once detect the effort, and, in self-defense, decline to send him patients as a specialist so long as he does any general practice, and specialists as we all know, are largely dependent on practice sent to them by the family doctors.

As to the effect of predominant specialism upon the general physician's means of making a livelihood, Dr. Francis entertains the common forebodings, and he even suggests that the time is not far away when the family doctor's advice will no longer be asked as to the choice of a specialist. This omission, he intimates, will first be made by the wealthy, and the example will soon be followed by the large class of those who are neither rich nor so very poor as to depend on the hospitals and dispensaries, but these latter will probably find exclusive dependence on specialists too expensive and return to the present order of things.

However, there is a silver lining to the present order of things. However, there is a silver lining to the cloud depicted by Dr. Francis. "Very probably," he says, "the family doctor is about to be eclipsed for a time, perhaps to reappear later in a more glorified asdect."

The Nerve to Run a Locomotive.

The nervous taxation of running a train is vividly given in an editorial below from the Philadeldhia Medical Journal.

A prominent railroad official has recently portrayed, in rather vivid colors, the disastrous effects on the human system caused by running a fast locomotive. He is quoted as saying that this occupation breaks down a man's nerve. The engineer is depicted as descending from his cab, after a long and fast run, "with the heavy step of exhaustion; the elasticity and agility of the start all gone." It is upon the nervous system that the work of running a "flyer" bears heavily. The engineer becomes timorous; he can no longer hold his engine to its work; he falls behind his schedule time, and always brings his train in late. This loss of nerve, it is said, is suffered by the stoutest heart, but the length of service varies. Some men will last for twenty or thirty years, while others give out much sooner. All this applies to running fast trains. On the two Atlantic City lines, to which reference was aspecially made, a speed of more than a mile a minute has come to be the usual thing.

Although somewhat overcolored, this description is not altogether inaccurate. We imagine, however, that many an old engineer would laugh at being told that after every run "he had the heavy step of exhaustion." He might confess to being a trifle stiff after two or three hours in the cab, but he would probably deny that his nerves were in any way shattered. Any casual observer in Broad Street Station can see for himself that the engineers have not appearance of being neurasthenics. As long as everything goes well we doubt whether it is any greater trial to the nerves to a run a fast train than it is to run a slow one. It is only when accidents occur that an engineer is likely to become profoundly neurasthenic, ane to be ever after unfitted for his work. This may be so, even though the man is physically uninjured. Old railroad men can tell of plenty of such instances. We dnew recently of an engineer who had run fast trains on the Pennsylvania Railroad for thirty years without an accident, but who finally ran into a little "smash-up" in which he himself was not at all badly injured; and yet he could not return to his cab for more than a year. He had a fine case of traumatic neurasthenia. We refer to this subject as an illustration of the diseases of occupation.

Appendicitis and Morphine.

The International Journal of Surgery says: It is quite generally accepted rule that morphine is not to be given during attacks of appendicitis for fear of masking the symptoms. There is no doubt that this constitutes a real danger, yet there are certain exceptions to what is otherwise a rood rule to follow. If the diagnosis has been made early, and for any reason it is decided to delay operation, it is certainly best to give enough morphine to slightly ease the pain, providing the patient and his friends are made to realize that the cessation or mitigation of pain does not mean that there is an improvement. Again, in cases in which the bowels act fairly well, and in which an operation is refused by the patient, lessening the pain with a moderate amount of morphine is clearly indicated' while the diminution of peristalsis must do a good deal towards keeping the inflamed parts at rest. As a matter of fact, it is more than probable that in the so-called medical treatment of appendicitis some form of opinion constitutes a most important part of the therapy. It is to be avoided when the practitioner is undecided whether to operate or not, or when the patient's consent to a surgical procedure is not yet obtained. It is probable that in the hands of a careful observer, of one who does not depend upon pain alone for a diagnosis, its prudent use is indicated, and this notwithstanding the fact that, in less skillful, it has unquestionably brought about about many fatal results.

Tendencies in Therapeutics Abroad.

The consumption of drugs in all countries is something marvelous. There seems to be a fondness, almost a mania for people to take medicine. This subject is discussed editorially in American Medicine as follows:

In France as well as in America there seems to be a great consumption of drugs, but the reason seems to be that even well-known and highly esteemed physicians accept from the druggist a monthly commission, the size of which dedends on the amount of medicine prescribed. That may cure the fondness of that people for drugs. In Germany and Switzerland, however, there seems to exist a more healthful and rational state of affairs, lor not only necessary drugs, but all possible mental, climactic, dietetic, gymnastic and hygienic measures are also used accordidg to the needs of

the case' but these measures are under the control of the medical profession for the most part. A recent German medical congress published, each day it met, a pamphlet containing the minutes of the last meeting, the program for that day, the names and addresses of those present. and short abstracts of paperswhich were to be read. There were also, of course, a few pages of advertisements, and a perusal of these would have convinced the reader that the therapeutic measures mentioned were under the control and received the sanction of the medical profession. On one day the pamdhlet contained 103 pages, of which eighty-one were advertisements. Here we found advertisements of thirty-one bathing and spring resorts and of fifty-five sanitariums of various descriptions. Many hotels also provide suitable advantages for a patient who wishes to take the water cure, or the milk cure, or the grape cure, or the strawberry cure, etc. A spring of water which contains a particular metal in traces large enough to be perceived spectroscopically, although it cannot be detected chemically, may be as efficient a means for suggestion as is belief in Christian science, while o short stay under the hygienic arrangements, the rigid dietetic rules and the climactic advantages there will benefit the patient more than any number of placebos. A prominent professor of medicine recently recommended to his class the use of the grape cure, the raspberry cure, etc., stating that a patient who needed a limitation of proteid diet would obey orders much better if ordered to take the grape cure, or if grapes were not ripe, some other fruit cure, than if merely told to limit his meat diet.

Co-existence of the Typhoid and Malarial Infections.

The question as to whether there is such a disease as typho-malarial fever has been much a disputed point for many years. The Record commenting upon this question editorally says:

The question as to whether the condition, termed by Woodward in 1862 typho-malarial fever, is a specific disease or is malaria co-existing with typhoid fever has been at intervals since that date a much disputed point. Woodward himself, although he was responsible for the misleading denomination, did not consider that it expressed the affection correctly, for in 1876 at the Medical Congress held that year in Philadelphia, he read a paper in which he distinctly stated that malaria and typhoid fever occurring in the same individual and at the same time should not be looked upon as a specific disease, but rather as a coincident infection.

Moreover, the greater number of physicians who have had the opportunity of studying these maladies have passed their opinion to the effect that, when a person is impregnated with the poison of both diseases concurrently, coincident infection is the right word to addly to the state.

Dr. W. G. Thompson, writing of the so-called typho-malarial fever in 1893, said: "The name typho-malarial fever must not be held to imply a specific disease, but rather a combination or co-existence of two diseases, typhoid fever and malarial fever, in the same person." Osler, Thayer, and the French investigators take practically identical views.

The Spanish-American War, during which a large number of soldiers were attacked by typhoid fever accompanied by undeniable symptoms of malaria, aroused renewed interest in the subject, and efforts have been made to settle the matter once and for all. Dr. Irving P. Lyon of Buffalo has set himself to the task and has recently published a phamphlet in which the whole question is intelligently and exhaustively dealt with. He has gathered from various sources, twenty-nine well-authenticated cases, to which he has added one which he himself had charge of in the John Hopkins Hospital, and he has reached the conclusion that what is known as typho-malarial fever actually, as Woodward declared in 1876, coincident typhoid and malarial infection.

Perhaps the portion of Dr. Lyon's paper which will possess the greatest interest to the majority of our readers in his account of the discrepancy in the description of the two-fold infection given by American and French observers. The French writers regard the fever in a far more serious light than do the Americans, asserting that the symptoms are in most instances severe and the mortality correspondingly high, and and that rose spots are the rule rather than the exception. The Americans say that the duration of the fever is shorter, and that it is in all respects of a milder type than true typhoid fever and that the occurrence of rose spots is infrequent, while the naturally prognosis is favorable and the mortality quite low. How then to reconcile these diverging views is somewhat difficult.

The explanation given by Dr. Lyon is that a coincident malarial and typhoid infection, as described by French writers, is really in a high degree dangerous to life, for the reason that it is a true infection, but that the typho-malarial fever which is so often adverted to by American writers as

prevailing in many parts of the United States, is not in fact the two diseases in conjunction at all, but simply mild typhoid fever or continued malarial fever.

With respect to the clinical picture presented in the cases recorded by Dr- Lyon and in those described by French writers, typhoid fever in nearly all the cases dominated the scene and this would seem to indicate, as Continental observers have suggested, that typhoid fever is the more masterful disease; but as Dr. Lyon wisely points out the important fact must not be forgotten that quinine was freely used against the malarial element whenever it appeared, and in all probability, in some cases at least, completely changed the clinical picture that would otherwise have been seen.

Authority in Medicine.

According to the Journal of the American Medical Association, it is fortunate that in medicine we are not wedded to precedent as in law, and that authority is only presumption. Every dictum, no matter from how high a source, must be tested by the rigid rules of evidence, rules much more exacting in medicine than in law, though not laid down with such precision. When, therefore, Professor Koch expresses an opinion that is opposed to the generally accepted views, no matter how high his authority, its correctness must be shown by experimental methods or adequate clinical observations before it can form a part of the admitted medical beliefs. The evidence that has been convincing to him must be tested by others and, it is safe to say, be supplemented by further facts before it is fully satisfactory to many of those tuberculosis specialists that have, so to speak, staked their reputation upon the truth of opposing views. We can expect, therefore, a lively controversy, a thorough discussion of the facts thus far available, and a very general search for new ones that will bear upon one or the other side of the questtion. His utterances will, beyond doubt, call out also many who, like him, have experienced doubts, but have been hesitant in their expression; he will not stand alone on his side of the debate. They will also stimulate active research, experimental so far as is possible, both private and by public boards of health, etc., and all this will be a distinct gain to science and ultimately also of practical benefit in guiding public policy on this important question. What we know or suspect will be proven or disproven; we shall stand at last, whatever the decision may be, on firmer ground. This is the utility of authority in medicine; it is not slavishly accepted, but is a stimulant to thought and work and thus a direct factor in scientific progress. Whether Prof. Koch is right or wrong, his open statement will, it is hoped, help to put an end to dogmatic assertion which has too much prevailed in the discussion of tuberculosis; we shall have less words and more work on the subject, and therefore more reliable results. There are many who believe in the transmissibility of bovine tuberculosis to man who have yet felt a want of reasons for the faith that is in them. Medical science is not safely based on *a priori* deductions, however expedient they may seem to be, and we certainly lack a sufficient body of evidence on this particular point. Let us hope that it will be soon supplied.

"The Most Easily Gullible of all People."

American Medicine is not of the opinion that physicians are the most gullible of all people. Physicians as usual are alert and make a good second to the lawyer in detecting fraudulent schemes. Concerning this subject, American Medicine says editorially:

"The most easily gullible of all people" is the way we have frequently heard the medical profession prescribed; but always by some one financially interested or who perhaps had himself failed in some humbugging scheme. The stupidity of such a statement is equal to its malignity. There is perhaps one profession, that of the law, whose members are more alert-minded than we to detect the fraudulent schemer. Take the one example, which is especially pointed out in illustration of the case with which medical men are deceived, that of the many and low-type medical journals we are said to support, the kind, for instance, that are anything but professional, and that win for their proprietors luxury and wealth. It is supposed that such publications live by the subscriptions of medical men. But this is not so. They live by other means. Not one-tenth or one-twentieth of the names on the mailing list represent paid subscripsions, and of this number a very small part is made up of reputable physicians. The one who is tricked is the sharp and cunning advertiser who believes what is told him about "circulation" and "postoffice receipts." Those advertisers who are astute enough not to be caught in this way are themselves playing a desperate game of appealing to the quacks (those few within and those many without professional limits), or to the public, or *first* to the profession and *then* to the public. Even in the more adroitly managed commercial journals there has been no lack of recognition of the nature

of the transaction, only a want of well-managed professionally-owned substitute journals. Now that with increased and growing professional unity there are coming into existence more and better managed journals of this character, physicians are giving them a rapidly increasing support. A similar analysis might be made of other illustrations offered as to the readiness with which we are supposed to be humbugged. We are sufficiently serpent-wise.

The Clinical Diagnosis of Influenza.

Influenza, it seems, has come among us to stay. We are interested in it clinically as well as otherwise, and commend the following extract from the Journal of the American Medical Association:

The symptoms of influenza are in general not so distinctive as to permit always of ready and infallible diagnosis from clinical observation, and bacteriologic investigation is not so simple of application as to be often resorted to, so that it is not unlikely that on the one hand a good deal of what goes by the name of influenza is really not that disease, while on the other hand a not inconsiderable number of cases of this affection may escape recognition, or be mistaken for other affections. Accordingly, it would be of a source of great comfort to the careful clinician to know that certain manifestations are distinctive of influenza, and at the same time sufficiently common to make their presence valuable from the diagnostic point of view. To such a symptom renewed attention is called by Dr. F. Frank's, who has found it in almost every case of influenza observed in the past nine years, but under no other conditions. It consists in a band of redness upon the anterior palatine arch, and it may persist for a long time after the attack has terminated; the uvula and the tonsils are not involved. In many cases the discoloration is attended with no subjective manifestation, but not rarely symptoms of angina are present, among which a sense of constriction of the throat is characteristic. Another typical symptom, almost as common as that just described, is enlargement of the papillæ of the anterior portion of the tongue. This is only less marked than in cases of scarlet fever. It is usually unattended with subjective symptoms, but at times there is a sense of soreness or pain at the tip of the tongue. A further sign, that was observed rather frequently in protracted or recurrent cases, is enlargement of the spleen; this is usually demonstrable only by percussion and not by palpation, and its persistence is of unfavorable prognostic significance.

MISCELLANEOUS.

Diphtheria in Measles.

In two and a half years in the South Department of the Boston City Hospital 157 patients had been treated suffering from this complication, with 54 deaths, or 34 per cent. The death-rate for the uncomplicated diphtheria patients at the same time was less than 13 per cent. Of the whole number, 82, or 52 per cent., had laryngeal diphtheria, and of these 36 died. The greater number of laryngeal cases and the higher death-rate is most striking. The earlier in the course of measles diphtheria develops the more serious the disease. The causes of death are noticed by Blakely and Burrows. In 31 of the 54 diphtheria poisoning alone seems to be the factor, hence the importance of early diagnosis. The existence of diphtheria or the possibility of its onset should be borne in mind in every case of measles. Where the air-passages are especially vulnerable, nasal or laryngeal obstruction occurring in measles almost certainly means diphtheria. If the initial fever disappears and there is a later sudden rise of temperature or if the cough becomes "brassy" in quality or paroxysmal in character and is accompanied by rise in temperature, the possibility of diphtheria must be considered. If the initial fever persists and aphonia develops, diphtheria is probably the cause. The purulent or muco-purulent discharge of partial, or complete nasal obstruction with glairy discharge suggests diphtheria. If the general condition, in addition, suggests it, antitoxin should be given at once without waiting the results of cultures. In all obscure cases the patient should be given the benefit of the doubt.—*Journal American Medical Association.*

Three Cæsarean Sections in One Patient.

Wiener states that a dwarf underwent Cæsarean section twice at the Munich Maternity Hospital. An abscess developed in the abdominal walls after the second operation and burst; a fistula developed and continued to discharge during the next pregnancy. One night, close upon term, flooding occurred through the fistula and caused serious anæmia. She was at once admitted into the Maternity Hospital, the fistula plugged, and abdominal section undertaken as soon as possible. Firm adhesions between the uretus, parietes, and omentum had to be separated. Then a transverse fundal incision was made; as the placenta was attached to the an-

terior wall and did not reach so high as the fundus it was not wounded. A recently-dead child was delivered. Then retroperitoneal hysterectomy was performed. Infusion of saline solution subcutaneously and injection of the solution into the bowel was practiced. The patient recovered. The fistulous tract did not open into the uterine cavity, but was in direct proximity to the placenta. In the track of the cicatrix of the second operation was further evidence of suppuration of sutures.—*British Medical Journal.*

The Injection of Vasaline to Reinforce Stumps of Artificial Eyes.

M. Rohmer, of Paris, has recently presented some examples of exact movement and perfect appearance of artificial eyes. Fifteen days after the enucleation he injects 2 cubic centimetres of sterilized vaseline through the conjunctival cicatrix, and in a week repeats this operation. When another week has passed the artificial eye is fitted to reinforced stump. It is claimed that even the well-known cadaveric groove disappears from the upper lid. Rohmer got his idea from Gersuny, of Vienna, who recommends this procedure to fill the place of an absent testicle in order to prevent varicocele and to fill the hernial orifice.

M. Albert Mathiere, of the Hospital Chariti, Paris, is now using hot calcium chloride injections in hemorrhagic cases of typhoid fever. A solution of 60 to 75 grains of the chloride in a quart of very hot water is slowly injected into the bowels 3 to 4 times a day. All cold baths or packs are suspended in the meantime and no food is allowed; nothing but copious drinks of hot water. The number of injections is lessened as the amount of the blood clots in the dejections decreases.

A New Method of Testing Blood Stains.—This method will doubtless supersede the long and tedious laboratory tests now generally resorted to for blood stains. The testing serum is the practical cavillary of the celebrated experiments of Bordet. By injecting defibrinated blood from one animal into another of a different species, he has shown that the serum of the animal acquires, after a certain time, the property of dissolving the hæmatice of the blood of the animal from which the injection came. The suspected blood is dissolved in a normal chloride solution and placed in a test tube to which is added 10 to 20 drops of the prepared serum and then brought to the boiling point. If, after cooling, the fluid remains lumpid, it is human blood, else it is that of an ape or a kangaroo. If it is the blood of any other animal the fluid remains turbid, with a dark precipitate.

Thirier and Moreau, French surgeons, have recently been using oxygenated water for antiseptic solutions. Others have objected to it as having a tendency to produce secondary hemorrhage.

*Translated from the French by Arthur G. Hobbs, M. D., Ophthalmic and Aural Surgeon to the Presbyterian Hospital, Atlanta, Ga.

Chronic Gastritis--Report of a Case.*

By Dr. Chas. J. Pollard, Princeton, Ky.

Chronic gastritis is a condition of the stomach almost daily met with in this country in a more or less developed form, and to successfully treat these cases as they come to us is a goal we all desire to reach.

This disease is almost invariably associated with more or less indigestion manifested by many protein symptoms and accompanied by more or less active vomiting of the ingested materials.

The gastric secretions are almost without exception abnormal, many fermentative changes taking place in stomach contents, thus necessitating lavage more or less frequently for its relief.

The report and treatment of the following case, while not strictly in accord with true homœopathic prescribing, perhaps was so prompt in effect and has proven so lasting in results that I shall be willing to shoulder any censure thot may be heaped upon me.

On May 21, 1900, Mr. H. came to me from an adjoining country and applied for treatment, having been through the hands of two old school physicians, in the last four years.

His age, 57; average build, lean, languid, dull, expressionless eyes, coated tongue, dirty, sallow colored skin; gave history of indigestion for last four years, characterized by eructations of sour materials, pain after eating, nervous depression, sleepless nights, constipation alternating with occasional attacks of diarrhœa, vomiting, not marked, loss of flesh, weak pulse, flabby muscles, in fact, a typical case of gastric catarrh in its chronic form.

From the history of treatment and the many symptoms pointing to the drug, I prescribed nux vomica and diluted muriatic acid after meals, believing the digestive fluids deficient in quantity. The patient reported some improvement in two weeks,

*Read before the meeting of Kentucky State Homœopathic Medicul Society, May 29, 30, 1901.

his medicine was repeated and he was cautioned about diet, as formerly.

He reported again on the 21st of June, 1900, and gave history of an attack of rheumatism one week before, but still improving slowly of his stomach trouble.

In the meantime I had been studying this case arduously, I read of a case having been successfully treated with hydrozone and glycozone, then I concluded to use these as adjuvants when patient returned.

Owing to impossibility of regular lavage, I furnished patient with two ounces of hydrozone and directed him to one ounce to a quart of sterilized water and take half a tumblerful half an hour before meals.

This, you will perceive, would procure a clean surface for the oncoming meal, though for the first few days it produced some discomfort he said from accumulation of gas.

Immediately after meals he was ordered to take a teaspoonful of glycozone in a wineglassful of water and three grains of nux vomica.

The next report was the 16th of July, when the improvement was very marked in his general appearance; patient was then able to eat without any dread of pain or discomfort.

Prescription was repeated and by August 1st all signs of any lesion of stomach had disappeared. Patient claimed to be well for the first time in four and one-half years.

Treatment was discontinued of course. I saw this patient recently and he had practically no trouble since last August.

Dr. Finlay Ellingwood, in his excellent Materia Medica, says glycozone is one of the best manufactured products of the present time in its action upon enfeebled disordered stomachs, especially if there is ulceration or catarrhal gastritis.

It is a most efficient preparation and I shall use it freely in the future.

The Treatment of Cystitis.

The management of a patient with acute inflammation of the bladder is usually simple enough, and in uncomplicated cases recovery is prompt; but when the disease becomes chronic, we often have a condition which taxes our patience severely. The treatment of those forms of cystitis which are caused by calculus, gonosrhœa, new growth, or stricture must, of course, depend upon the removal of the cause, since the inflammation is distinctly secondary to such conditions, but these conditions are not responsible for the very proportion of cases of cystitis in which the disease is of a tuberculous nature, and it is tuberculous cystitis which requires such long and patient treatment, both of local and general conditions, and which is so difficult to deal with satisfactorily by surgical means. Von Hofmann has recently (*Die moderne Therapie der Cystitis, 1901*) contributed an interesting monograph on this subject, and he devotes much space to the treatment of tuberculous cystitis, which he considers the most important form of the disease. His main idea is that the disease should be considered general as well as local, and that very active systemic treatment should be instituted. In this regard creosote and guaiacol and their preparations seem to be the best drugs, but the question of nutrition is also of great importance, just as it is in pulmonary tuberculosis. Surgery has been called upon in many cases of tuberculous cystitis, but the most that can usually be done is to establish drainage, unless we should be so fortunate as to meet a case with a circumscribed ulcerative process, which could be treated by scraping or cauterization.

As is well known, the establishment of permanent drainage is, as a rule, followed by amelioration in the patient's condition, since, by it, the bladder is placed completely at rest; but when we want the fistula to close it will not always do so, and the results are very uncertain as to permanent benefit, no matter what treatment is employed in addition to the drainage. Von Hofmann recommends as useful preparations several salts of guaiacol, and specially notices the cinnamylate, and he also insists upon the importance of pushing the patient's nutrition as much as possible.

The local applications which will do good in cases of tuberculous cystitis are various solutions having germicidal qualities, and among other preparations may be mentioned several salts of silver and mercury. Patients will be found to differ in their tolerance of these preparations, and trial alone will show which is best and what strength individual cases will require. The most important reason for failure in treating this unpleasant disease is that the tuberculous process is rarely limited to the bladder, but commonly involves other parts of the genital tract, from which it is difficult or impossible to eradicate it. Our treatment of tuberculous cystitis must, therefore, remain much as it has been, systemic and local; the former consisting in pushing nutrition as much as possible and using some of the drugs which have been mentioned, and the latter consisting in the employment of those operative means which place the bladder at rest or eradicate any accessible foci of disease, and

the use of appropriate local treatment by means of germicides and antiseptics. Many patients will improve under such a regimen, but the condition is one of the most unsatisfactory with which surgeon is called upon to deal. We might add that Von Hofmann looks upon the development of cystitis in a patient with an enlarged prostrate as a serious matter to be avoided by rigid observance of catheter precautions. If cystitis does occur in such cases, he relies on nitrate-of-silver irrigation, and the internal administration of a urinary antiseptic. Good results in genito-urinary surgery sometimes follow the substitution of an organic compound of silver for the nitrate.

Urotropin.

Professor W. F. Loebisch, Director of the Laboratory for Applied Medical Chemistry at the Imperial and Royal University of Innsbruck, in a discourse held before the Medical Society of that city, published in the Wiener Medicinische Presse, Nos. 27 and 28, 1901, details at length the results of his experimental researches upon the influence of Urotropin upon intestinal decomposition. In spite of the demonstration of the inhibitory influence of the drug upon the development of the bacterium coli by Nicolaier, and of its destructive effect upon typhoid bacilli in the urine by Richardson, a direct influence of the Urotropin ingested upon intestinal fermentation itself was not thought of. Loebisch himself had his attention called to it quite accidentally. He was examining the urine of a man who was well nourished and upon a mixed diet, and who was taking Urotropin to the extent of 0.5 to 1 gram (7½ to 15 grains) daily for a posterior urethritis, and found that neither by Jaffe's or Obermayer's test could he get any reaction for indican, Now the presence of this substance in the urine is one of the most accessible and reliable indications of the occurrence of bacterial intestinal decomposition, and he was thus led to investigate the action of the drug upon these ordinary enteric changes.

Mr. Ernst Mayerhoffer, Assistant at his Institute, made a series of personal experiments for the determination of the matter, during a period of twenty days. The diet was of the usual mixed variety. Only upon the last three days of the experimentation was it made uniform in quantity and quality.

As the tables presented by Loebisch clearly show, the indican in the urine examined decreased pari passu with the amount of Urotropin that was daily administered, until finally it disappeared altogether. The conclusion was inevitable that Urotropin, administered in daily doses of 2 grams (30 grains) to a healthy individual upon a mixed diet, inhibits ordinary bacterial intestinal putrefaction.

In view of the fact that the increased excretion of indican in the urine in an important symptom in various diseases, Loebisch next inquires whether this property of Urotropin to diminish or even abolish it in moderate daily doses of 2 grams (30 grains) cannot be utilized therapeutically.

Now both indol and skatol appear in the large intestine in consequence of a peculiar process of decomposition in which various ærobic and anærobic bacteria are also concerned. Indol is not necessarily formed in ordinary albuminoid decomposition; apparently the ærobic indol-formers hinder this process. Under normal circumstances both the indols and the phenols are formed in the large intestine. Jaffe has shown that indican is increased in the urine in all cases in which the small intestine is occluded, as in incarceration from hernia or peritoneal adhesions; and H. Senator has found it augmented in chronic wasting processes, such as cancer of the stomach, etc., and even in simple coprostasis. Clinicians therefore look upon the increase of indican in the urine as an indication of a disturbance of the normal decomposition processes of the alimentary canal.

Disinfection of the intestinal canal is desirable in many cases in which agents like calomel, which cause diarrhœa, are not appropriate. The contents must so far as possible be disinfected in situ; for which purpose the phenols, cresols, tribomphenol, thymol, and many other substances have been recommended. They have not obtained a very wide acceptance, however, perhaps for the reason that most of them are poisons, and the non-toxic medicinal dose may be readily over-passed.

Urotropin is a remedy that is very soluble in water, that by the above experiments has been proven to be inhibitory to intestinal decomposition, that has been found valuable in the treatment of various bladder diseases, and that has been proven to be harmless even when taken for weeks at a time in medicinal doses. Mayerhofer did not suffer from the least physical disturbance during the twenty days that he took the drug; I even had the impression that his complexion cleared, and that his physical energy was increased.

Loebisch then made a series of experiments as to the power of Urotropin to prevent the decomposition of non-sterile fibrin. They found that it had a hindering effect

even when employed in very dilute (1:10,000) solution.

There is abundant evidence before us as to its power of inhibiting the development of the specific intestinal bacteria. Bacteriuria due to the bacterium coli (Nicolaier, Heubner) and the bacillus lactis ærogenes (Kruse) have been cured by its use. Loebisch has himself observed a case of recurrent bacteriuria which was always quickly relieved by a few doses of Urotropin. American, German, and English observers have testified to its beneficial influence upon typhoid bacilli in the urine. In view of these facts and of the foregoing experiments, there can be no doubt that Urotropin influences the bacteria of the intestinal canal in a similar manner. It is now the turn of the clinicians to experiment therapeutically with the drug in the many cases of abnormal intestinal decomposition.

The Quantity of Water in Foods.

It is not very generally realized how much water there is in solid food. Certain it is that no natural food is without water, varying in amount from 5 to 97 per cent. short of pure water itself. Milk, of course, must be taken as the type of a complete food and yet it contains, even straight from the cow, very nearly 90 per cent. of water, or, to be more accurate, from 87 to 88 per cent. That is to say, more than four-fifths of milk consist of water, and as this is the condition in which it is naturally furnished the inference is the fats, the sugars, and the proteids were intended to be taken in diluted state. Indeed, the composition of other foods would teach the same thing, although, paradoxical as it may seem, some solid foods contain more water than does milk. This is especially true of vegetables and fruits. Thus the turnip contains over 90 per cent. of water, the cabbage nearly the same amount, and the cucumber and the vegetable marrow about 95 per cent.; whilst amongst fruits the strawberry contains nearly 90 per cent. of water, the apple 82 per cent., and grapes 80 per cent. Even the various meats used as food contain an amount of water far in excess of the amount of solid constituents. Thus three-fourths of beef and mutton consist of water. The housekeeper, perhaps scarcely realizes when consulting the butcher's price list that three-fourths of the meat are water and are paid for with the rest at the rate of a shilling or more per pound. Lamb contains less water, namely 64 per cent., pork still less, 60.9 per cent., and bacon only 22.3 per cent. It would appear that as the flesh foods increase in the amount of fat the proportion of water, as a rule, diminishes. Coming to birds, the flesh of the fowls and duck contains about 70 per cent. of water and that of the pigeon 75 per cent. while the flesh of the goose contains only 38 per cent., the last being another example of the fat increasing with a corresponding diminution in the proportion of water. Fishes contain from 40 to 80 per cent. of water. The egg, one of the most powerful of nutritives, contains 65,5 per cent. of water, the white, consisting of 86 per cent. and the yolk of 50.9 per cent. The latter, of course, is the more nourishing part. As a rule foods containing a small proportion of water are not fit for human consumption until they are cooked, which commonly means reducing them to a digestible state by adding water and boiling or baking, and so when they are actually partaken of they contain a good percentage of water. Wheat flour, for example, contains only 12 per cent. of water, while bread contains nearly 50 per cent. It would appear to be necessary, therefore that food should be in a decidely moist condition before it is fit for use, and thus water plays a role in food which at first sight perhaps does not seem evident. Bacteria cannot live or act except under a wet environment and chemical change under absolutely dry conditions is impossible; therefore without moisture life would cease and the great vital processes would come to an end.—*The Lancet.*

Anæsthesia by Chloroform and Its Dangers.

Flockemann in a contribution on "the limit to the pupillary reaction to light in chloroform narcosis," expresses a strong objection to the practice of continuing the administration of this anæsthetic during the stage of deep unconsciousness, marked by a decided tendency indepedently of the influence of light, to dilatation of the pupils. Such a condition, he points out, is very near to one to complete death, and ought to excite great anxiety. He regards as the limit contraindicating any further pushing of the anæsthetic that stage in which the pupils, though still contracted, cease to act to light when both eyes are uncovered. When the contracted pupils do react to light the patient is just about to come round or has already become to some extent sensible. Then the renewed administration of a small quantity of chloroform slowly and by drops in the first case, rather rapidly in the latter, will effectually and with safety again place the patient under the influence of the anæsthetic to the required degree. The only indication for a further administration of chloroform be-

yond the stage at which at which the contracted pupils have ceased to react to light is the somewhat rare event of persistence in this stage of corneal reflex. The author holds that by this method of regulating the administration of chloroform in accordance with his limit of pupillary reaction to light, the full benefits of this anæsthetic can be obtained with reduced consumption of the agent and much less risk to the patient. In the same number of the *Centralblatt* Aglinzeff publishes a case of death from chloroform in which direct massage of the heart was practiced without success. At the end of an operation for the removal of an osteomyelitic sequestrum from the radius, during which a mixture of choloral and chloroform had been administered by drops, the patient—a boy aged 15 years—suddenly became pulseless. After the performance of tracheotomy and prolonged attempts to establish artificial respiration, an opening was made in the anterior wall of the thorax on the left side and the pericardium exposed. Rhythmical compression of the heart excited slight movements of this organ, and pulsation was observed in the large blood vessels of the thoracic cavity, but the respiration, in spite of strenuous and prolonged efforts to restore the action of the lungs, was not renewed, and after an interval of halt an hour, during which cardiac massage was energetically and persistently practiced, the movements of the heart ceased. In some comments on this case the author states that he is disposed to attribute the failure of cardiac massage to the fact that the patient had been for two months the subject of severe pyæmic infection with continuous fever. The result of the treatment was also unfavorably influenced by a wound of the left pleura during the operation for exposing the pericardium, and by consequent pneumothorax on the left side. Whilst acknowledging that no subject of intense poisoning by chloroform has yet been brought to life by Maag's plan of cardiac massage, the author thinks that with future improvements in its tecnical details a good result is not altogether hopeless.—*British Medical Journal.*

The Spread of Epidemic Cerebro-Spinal Meningitis.

The spread of epidemic cerebro-spinal meningitis was the subject of a paper read at the Congress for Internal Medicine, which recently met in Berlin. While the speaker, a prominent military medical afficer, whose name is familiar to all who are interested in the literature on this disease, was introducing his subject, the thought may have occurred to the other Americans present, "will he also utterly disregard all the American literature on this disease?" But no, he was evidently fairly well acquainted with it, or at least had studied our health reports with interest. America, according to this authority, is the home of this epidemic. America is to the epidemic, cerebro-spinal meningitis, what India is to cholera, the land where it is endemic. From America it has, on several occasions, been carried into Germany. Conspicuous among the charts and maps which the speaker exhibited later to illustrate his paper, was one of the United States, upon which "the densely populated areas where this pest exists endemically" were indicated by black areas. New York, Baltimore, Boston, and a few others were the areas thus marked. The speaker said nothing about the necessity of new quarantine to protect Germany against this, our disease, but perhaps that will come later.

We may doubt that Germany owes her many epidemics of this disease, especially among soldiers, to infection from America; we may consider we are as little dangerous to Germany in this particular as in the case of our fruits and meats, against which she has waged such an unnecessary and bitter war; we may smile at the charts on which certain cities, in which reside scientists who have written considerable on this subject, or whose health reports were more accessible to our German friend, were conspicuous as large black squares, characterizing them as pest centres; yet one thing is certain, that we have and have had a great deal of this disease, perhaps more than our share. Germany has discovered for us the cause of this disease; Germany has also contributed largely to the methods of this diagnosis; American scientists should strive to contribute something equally valuable. Reports of epidemics, careful work on its pathologic anatomy, are important and valuable, but betray the sad fact that we have abundant opportunity to study this side of the subject. Let us hope that we may contribute to the knowledge of the methods of its transmission, to the means of prevention, and, if dossible, cure.—*American Medicine.*

The Method of Bathing.

A most important sanitary and political question, that of public baths in the tenement-house districts of cities, is now being discussed with much heat. City governments are commanded to supply such baths and the basis of all the arguments used is that there is no cleanliness except the body is immersed in or sprayed with a barrel or

two of water. None more than we would advise the extended use of baths of this kind, but as we have previously urged, it is high time that hygienists should educate the public up to the point of recognizing that the spray or the tub-bath is not necessary for cleanliness. An editorial in a great journal says, "How many would bathe if all the water had to be carried by hand from a hydrant often up several flights of stairs?" And then this foolish writer draws the necessary deduction that the city must furnish free baths to its citizens. Now in the first place, not all the people of the United States live in cities. We think more than a half do not. If the community must furnish its citizens free tub and spray baths, by what logic is the duty limited to the tax-payers of cities? The price of pure water (and if not pure it is not advisable even for bathing) is growing greater every year, and the water-meter must make tub-bathing, and other methods requiring a large amount of water, too expensive except for the few of the well-to-do in cities. The fallacy that there is no cleanliness except by immersion is a most pernicious one, productive of no-bathing, and hence of disease. By all means encourage immersion and tubbing and spraying for those who can afford it, but do not let us be guilty, as hygienists, of teaching the people any longer that there is but one method of cleansing the body. A sponge or a wet towel with two gallons of water will cleanse the body as well in five minutes as a hundred gallons in two hours.—*American Medicine.*

Drugs, Placebos, Etc,

The American people have an inordinate fondness for medicine. They have long believed that for every illness, ache and pain, there exists a specific remedy, and that it is the duty of the physician to prescribe this, although the patent medicine manufacturer and dealer have become very acceptable substitutes. Medical science has taught us that doctors have over-estimated the efficiency of many of their prescriptions, but this error will hardly explain the preference of the people for a therapeutic measure administered by the mouth; on the contrary they have forced the physician to prescribe something, they cared little what, hence placebos have been generally used when mental stimulus was necessary since the doctor realized that faith in a drug is the easiest method of applying mental therapy. That the medical profession did not take a firmer stand against this abuse is regrettable, since on the one hand America has become the richest harvest field for the patent medicine manufacturer; on the other hand Christian Science is flourishing, since many will swing from one extreme to the opposite. There are many other therapeutic measures which if well-recommended may have equal mental effect and which certainly are more healthful than medicines. Should these be used instead of placebos, and especially should these be under supervision of regular practitioners, the result would be much better for the community, for, where suggestion is a tool, especially in the hands of Christian Scientists, and when charlatans can control health resorts, the patient may or may not receive the treatment adapted to his case.—*American Medicine*

The Requirements of a Malpractice Case.

In the case of Wheeler vs. Bowles, where there was a charge of malpractice in the treatment of a dislocated shoulder, and it was contended, in defense, that the treatment rendered was proper and that all the trouble was owing to a negligent second dislocation after the case had been dismissed, the Supreme Court of Missouri, Division No. 2, has affirmed a judgment for the plaintiff for $4,000 damages. It holds that the instructions given the jury were remarkably fair and contained every element necessary, requiring the jury to find that the defendant was employed by the plaintiff to set and heal her dislocated shoulder, and that he negligently treated and managed it, and, through his negligence, the dislocation was not reduced, and the plaintiff's shoulder had become permanently injured, lamed, and disfigured, and then leaving the jury to find the amount that the plaintiff should recover for such injury. It thinks this sufficient, especially as one of the instructions deprived the plaintiff of the right to recover her loss of time and services, because she was a married woman, and the services of a wife belong wholly to her husband. It was desired to have the jury restricted to certain elements of damages, an appropriate instruction on that subject, it holds, should have been offered. By the fourth instruction given the jury were told that in determining this case they were to consider that the defendant did not warrant a cure, but his contract, as implied in law, was that he possessed that reasonable degree of learning, skill and experience which was ordinarily possessed by others of his profession; that he would use reasonable and ordinary care and diligence in the treatment of the case; and that he would use his best judgment, in all matters of doubt, as to the proper course of treatment. The defendant was not responsible

in damages for want of success, unless it was shown from the evidence to result from the want of ordinary skill and learning, and such as was ordinarily possessed by others of his profession, acting under like circumstances, or from want of ordinary care and attention.—*Journal of the American Medical Association.*

Mortality from Tuberculous Phthisis.

In a paper read by Dr. John Tstham, F.R.C.P., at the recent Tuberculous Congress, tables are given which show that between the years 1851 and 1899 every age, with a few trifling exceptions, has experienced a decrease in the mortality ascribed to phthisis. In every case the mortality in 1895–99 was lower than it had been in 1851–60, but the rate of decrease has varied widely, and has been much greater among females than among males. The reduction shown by the tables may not, however, be wholly real, and may be due in part to the vaguer statement of causes of death in the earlier period; as, for instance, by the habitual use of the terms "consumption" and "decline" to describe any lingering disease of the lungs attended by "wasting." The figures, therefore, must be taken for what they are worth.

Tracing backwards through all these years the incidence of the maximum mortality from phthisis we find that it has not always been at the ages from 45 to 55 for males and from 35 to 45 for females, as it is at present. In the decade 1851–60 phthisis mortality was at its highest among males at ages from 20 to 25, and among females at ages from 25 to 35. Thus the period of maximum phthisis mortality has been postponed in both sexes. In other words, either the saving of life has been greater at the ages which were formerly most liable to phthisis than at the ages immediately following, or persons specially liable to phthisis have lived longer than they would have done under the earlier conditions.

Inoculation Against Typhoid Fever.

At present there are not sufficient statistics available to authorize a final pronouncement on the merits of anti-typhoid inoculation, but such results as have come to hand are distinctly encouraging. Among the 15th Hussars stationed at Meerut, India it would appear that tee incidence of enteric fever in the inoculated was represented by 0.55 per cent., and the mortality by 0.27 per cent., while the incidence in the uninoculated 6.14 per cent., and the death-rate 3.35 per cent. Professor Wright, of Netley, gave a summary in the discussion following Dr. Tooth's paper at the Clinical Society on March 8th of the figures available up to the present date (vide British Medical Journal. March 16, 1901). It is believed that the War Office are compiling a mass of statistics from the medical history sheets of our South African army, which ought to throw a definite light on the subject. Meanwhile, there is good reason to believe that both the incidence and the case-mortality of enteric fever are greatly reduced by the use of anti-typhoid vaccine, and ample warrant for the continuance of the practice.—*Treatment.*

The Frequency of Tuberculosis Among Alcoholics,

Felix Imbault draws attention to the importance of the relations between alcholism and tuberculosis, especially since the recent revival of a vigorous campaign against these two potent causes of diseases and social degeneration. According to Landouxy alcoholism "makes the bed for tuberculosis" (*fait le lit de la tuberculope*). It is with a view to get precise conclusions on this point that the present research was carried out—namely, as regards the frequency of tuberculosis among alcoholics. In 1864 Leudit, in a paper presented to the Medical Congress at Lyon, stated that among 121 adults drunkards who had died from various kinds of alcoholic intemperance, 20 were found to be tuberculous. He concluded that pulmonary phthisis was less frequent among the habitual drunkards than amongst the habitually sober. Imbert (*These de Paris*, 1896-97), from a total of 318 male alcoholics examined at the Laennec Hospital, made a special study of 131, and found that 15 of these, or 11 per cent., were affected with tuberculosis. From a similar special study of 68 females he found 6 cases of pulmonary tuberculosis and one of tuberculous peritonitis, or 10 per cent. It should be added that Imbert did not search specially or systematically for tuberculosis among these patients. Paul Raymond (1896) made observations at the Hotel Dieu in Paris. Among 62 drunkards of excessiveely intemperate habits and incapable of working he fonnd 14 cases of pulmonary tuberculosis. These cases were apparently free from a phthisical heredity, and comprised 38 males and 24 females. Imbault, from a series of enquiries addressed to medical practitioner in the country and in small towns, obtained trustworthy accounts of 248 alcoholics as regards the causes of death; of these, 44 died of pulmonary tuberculosis, 2 of tuberculous menigitis of laryngeal phthisis, 1 of general tuberculosis, and 1 of diabetes and tuber-

culosis, thus showing 49 deaths from tuberculosis, or 19.7 per cent., a proportion that he thinks is apparently very high. Tabarry in a recent *These de Paris* (1899-1900), from a careful statistical study of the geographical distribution of tuberculosis in France, came to the conclusion that it prevailed most in the districts where most alcohol was consumed, the correspondence being very close in the majority of the departments. In some, however, no parallelism could be traced. It appeared that in Brittany, where phthisis is very prevalent and is on the increase, other factors (hygienic and social) co-operate with alcoholism (Renault. *These de Paris*, 1900). Destree and Gallemaertz (*La Tuberculose eu Belgique*, 1889), from the Annual Official Statistics of Italy (1892), and from those of Bertillon of Paris (1897), it appears that "the professions or occupations in which alcoholism is common have in general a high mortality from tuberculosis" This is partly due to alcholism, but other etiological factors are also present. Among 45 phthisical patinents studied Imbault found 8 to be of temperate habits, the daily consumption of wine not exceeding 1½ litres per head. The rest were heavy drinkers, but of these 7 had ceased to drink heavily after the apperance of phthisical symptoms. All were male adults. The descendants of alcoholic parents show an excessive mortality, in which tuberculosis and meningitis play a most important part, as shown by the observations of Legrain. Grenier and others, and confirmed by the autnor.—*British Medical Journal.*

Sick Rooms in Modern Houses.

It has often susprised us to note how little attention is paid, in the construction of modern houses, to making proper provision for the care of the sick. Rooms are set apart for all possible purposes except the most important, viz.: to serve as secluded, hygienic abodes for sick members of families. The logical thing would be to have a room in one of the upper floors of every large private dwelling or apartment houses set aside for the specific purpose indicated. The appointments of such a room should be those of private rooms in hospitals. The walls and the floors should be tiled; light should be abundant; and, instead of the large, old-fashioned, wooden bedstead, into which the physician is almost compelled to climb when he wishes to examine the patient, and in which infection may lurk beyond the reach of disinfectants, there should be simple, metal one, pleasing to the eye, accessible from both sides, and readily sterilized. There may also be a washstand supplied with running water, which may be placed either in the sick chamber itself, or in a small adjoining room. While there is some difference of opinion regarding the advisability of running water in a sick-rooom, the risks are slight if the pipes are properly trapped. The small room adjoining the sick chamber should also contain the closet and bath-tub, the gas attachments for running a sterilizer, and the necessary closets and medicine cases.

The superiority of such a room in a private dwelling or an apartment house over a room in a hospitial is self-evident. It can be employed for confinement purposes, for isolating patients suffering from infectious diseases, and for taking care of all cases of protracted illness. There are, of course, many details to which we have not alluded. If, however, it should become the fashion to have such sick-rooms, skilled architects would soon familiarize themselves with the principles that should govern their construction. The present fever for building furnishes a good opportunity for the introduction of the innovation here proposed.—*American Medicine.*

Alcohol and Longevity.

While the crusade against inebriety has been waged for many years, the results of abstinence upon the individual—at least those of a purely physical nature, have not always been apparent. In the attempt to secure reliable data on this point the British Medical Association appointed a committee to ascertain the average age of the different classes of drinkers, namely: those who are abstainers—those who indulge more or less moderately, and those who drink to excess.

Conclusions based upon a study of 4234 deaths are given as follows, and show the average age attained by members of both of these classes:

"1. Total abstainers, 51 years, 22 days.
2. Habitually temperate drinkers, 63 years, 13 days.
3. Careless drinkers, 59 years, 67 days.
4. Free drinkers, 57 years, 59 days.
5. Decidedly intemperate drinkers, 53 years, 3 days.

These figures show singularly enough that those who reach the shortest age are those who drink no alcohol whatever. After them come the drunkards, who only exceed them by a trifle.

The Medical Association furnished further statistics of similar import. These were respecting persons who had attained the age of eighty and upward. Of the 530 deaths reported of persons between the ages of 80 and 90, 82, or 15.47 per cent. were total abstainers; 396, or 74.77 per cent.

moderate drinkers, and 52 or 9.81 per cent. heavy drinkers. Of the 159 persons between ages 90 and 100, 23 or 14.46 per cent. were total abstainers; 126, or 79.25 per cent. were moderate drinkers and 52 or 9.81 per cent. heavy drinkers. Of the 159 persons between ages 90 and 100, 23 or 14.46 per cent. were total substainers; 126, or 76.25 per cent. were moderate drinkers, and 10, or 6.29 per cent. were heavy drinkers. Of the 689 persons who died between the ages 80 and 100, 105, or 15.25 per cent. were total abstainers; 522, or 75.76 per cent were moderate drinkers, and 62, or 8.99 per cent. were heavy drinkers."

Although the reductions obtained from a study of the above are somewhat startling and may appear to some incredible, it may be stated that one or two insurance companies who have followed out a similar line of investigation, have obtained very similar results. A writer commenting editorially upon these facts says:

"We are inclined to think that the results obtained by the association's investigation are of more value than the association has the courage to believe (or rather to declare.) There is a large class among the total abstrainers that is made up of men who have in past years drank to excess, and who are now suffering from former indulgence; and there is another very large class consisting of men who have never enjoyed robust health, and who therefore have been compelled to abstain from alcohol. in the same way that dyspeptics have been compelled to abstain from certain foods. Their abstention does not mean that the foods in question are harmful; it need not inevitably follow in the case of abstinence from alcoholic drinks that alcohol in moderation is invariably deleterious. The abstainer from alcohol is not necessarily healthier than the non-abstainer any more than the abstainer from rich foods is healthier than the man who can eat anything. In many, perhaps in a majority of cases, the abstainer either from alcohol or from rich food does not look as healthy as the non-abstainer; oftentimes quite the contrary. The recent demonstrations by Prof. Atwater in respect to the food value of alcohol are not unlikely to cause a great many persons to change life-long opinions."

It seems apparent that in the study of this question the elements of prejudice and intolerance have been greatly in evidence and that the subject has never been treated in a comprehensive way and from a purely scientific standpoint.

Figures can be used to support the arguments of either faction, and are useful only when studied in connection with the moral, physical and social environments of the individual.

Theories Versus Facts.

A protesting voice should be raised against an ultracritical tendency. The desire to know the reason *why* is inherent in human nature and is the mainspring of progress. This desire cannot and should not be stiefld; but do facts cease to be facts simply because we cannot explain them? Were the millions of malarial patients before Laveran's discovery cured less effectively because we did not know the rationale of the action of quinin? And do we know *how* arsenic produces its remarkable alterative effects? Do we know how antipyrin reduces fever? There is not the least wish or intention of discouraging, or of underrating the value of laboratory researches. But *experimental* therapeutics is still in its infancy; there are too many factors to be taken into consideration before a conclusion reached by animal or chemical experimentation may be applied to the living human economy without fear of error. Such conclusions should be accepted tentatively; and an expectant attitude should be maintained toward them, until they are corroborated by clinical experience. If they disagree with the clinical facts gained at the bedside—provided these are facts—then let us stick to the facts, and let the speculations take care of themselves. It will probably be discovered in due time that either the experiments leading to the speculations were not performed under proper and suitable conditions, or that there was some weak link in the chain of reasoning. Between facts and speculations, facts should always have the deciding vote, and laboratory conclusions should yield the right of road to experience gained at the bedside by thousands of careful and unbiased observers.—*Merck's Archives.*

Can Man be Infected From Cattle.

With reference to the more important question, is it possible for cattle, sufferingfrom tuberculosis to infect man? it is impossible to give this question a direct answer, because, of course, the experimental investigation of it with human beings is out the question. Indirectly, however, one can try to approach it. It is well known that the milk and butter consumed in great cities very often contains large quantities of the bacilli of bovine tuberculosis in a living condition, as the numerous infection experiments with such dairy products on animals have proved. Most of the inhabitants of such cities daily consume

such living and perfectly virulent bacilli of bovine tuberculosis, and unintentionally carry out the experiment which investigators are not at liberty to make. If the bacilli of bovine tuberculosis were able to infect human beings, many cases of tuberculosis caused by the consumption of alimenta containing tubercle bacilli could not but occur among the inhabitants of great cities, especially the children. And most medical men believe that this is actually the case. In reality, however, it is not so. That a case of tuberculosis has been caused by alimenta can be assumed with certainty only when the intestine suffers first—that is when a so-called primary tuberculosis of the intestines is found. But such cases are extremely rare. Among many cases of tuberculosis examined after death, Koch remembers having seen primary tuberculosis of the intestine only twice. Among the great postmortem material of the Charite Hospital in Berlin ten cases of primary tuberculosis of the intestine occurred in five years. Among 933 cases of tuberculosis in children at the Emperor Frederick's Hospital for Children, Baginsky never found tuberculosis of the intestine without simultaneous disease of the lungs and the bronchial glands. Among 3,104 postmortem examinations of tuberculous children, Biedert observed only sixteen cases of primary tuberculosis of the intestine. From the literature of the subject many more statistics of the same kind could be cited, all indubitably showing that primary tuberculosis of the intestine, especially among children, is a comparatively rare disease, and of these few cases that have been enumerated, it is by no means certain that they were due to infection by bovine tuberculosis. It is just as likely that they were caused by the widely propagated bacilli of human tuberculosis, which may have got into the digestive canal in some way or other—for instance, by swallowing saliva from the mouth. Hitherto nobody could decide with certainly in such a case whether the tuberculosis of the intestine was of human or of animal origin. Now the diagnosis can be made. All that is necessary is to cultivate in pure culture the tubercle bacilli found in the tuberculous material, and to ascertain whether they belong to bovine tuberculosis by inoculating cattle with them. For this purpose he recomends subcutaneous injection, which yields quite specially characteristic and convincing results. For half a year past he has occupied himself with such investigations, but, owing to the rareness of the disease in question, the number of the cases he has been able to investigate is but small. What has hitherto resulted from this investigation does not support the assumption that bovine tuberculosis occurs in man.

Though tne important question whether man is susceptible to bovine tuberculosis at all is not yet absolutely decided, and will not admit of absolute decision to-day or tomorrow, one is nevertheless already at liberty to say that, if such susceptibility really exists, the infection of human beings is but a very rare occurrence. He estimated the extent of the infection by the milk and flesh of tuberculosis cattle, and the butter made of their milk, as hardly greater than that of hereditary transmission, and he therefore does not deem it advisable to take any measure against it,—*Medical News.*

Cerebral Hemorrhage and Endocarditis.

M. Simmonds reports 7 cases of cerebral hæmorrhage in which he considers the cause to be connected with vegetative endocarditis. The pathology of these cases, as Eplnger has made out, rests on the formation of miliary aneurysms by means of coccic infection. The cocci are derived from the vegetations of the valves, and are carried in the circulation to the cerebral vessels, when they are arrested by the decomposition of a thrombus, or it may be as an embolus. In 5 cases this pathology is not cleary depicted, but Simmonds points out that in the absence of any other cause of arterial decay, the explanation given is probably the correct one. A girl aged 11 was brought into hospital in a dying condition. The history was that there had been severe headache for two years, which became worse, and within the last few days gradual loss of consciousness and onset paralysis had taken place. Postmortem, a large hæmorrhage was found in the right cerebral hemisphere. In an arteriole of the pia matter a ruptured miliary aneurysm was found. The heart showed vegetations on the mitral cusps. The muscular wall and the whole arterial system was free from degenerative processes. The second case was that of a child, aged 10, who had suffered for years from otorrhœa. It was sent to the hospital for operation on account of severe cerebral symptoms, but died a few hours after admission. Postmortem, a hæmorrhage of the size of a hen's egg was found in the occipital lobe. At the lowest point of the clot, a ruptured aneurysm was discovered. There was endocarditis. The blood vessels were free from atheroma or other pathological conditions. In both the first and second cases the specimens of the pial thrombosed vessels and of the mitral valve on being stained by Gram. Weigert's method showed masses of staphylococci.

In the third and fourth cases, miliary aneurysms were found in the seat of hæmorrhage or in the cerebral vessels. but no micrococci were discovered. In both cases there was no arterial sclerosis, atheroma, or any other ascertainable cause of cerebral hæmorrhage. In the last 3 cases the postmortem examination did not reveal any aneurysms, but beside the hæmorrhage the vegetative endocarditis was the only abnormality found. He discusses the pathology of each case, and refers at length to the work of Ponfick and Eppinger on the subject —*British Medidal Journal.*

Bubonic Plague.

The total number of cases reported in Hong Kong to June 21 is 1,406, with 1,334 deaths. Ten Europeans hove died from the disease. Large numbers of Chinese with their families have left the colony, the total being estimated at 70,000 to 100,000. In 1895 the number of cases to June 21 was 2.007. During the last few days the cases per day average 20. The number of deaths returned for the whole of India has declined from 11,606 during the first in April to only 1,066 in the lrst week of May, the fall being a general one affecting all parts of the country. Still the present numbers are just twice as large as at the same period of last year, so that there is no evidence whatever as yet of any tendency for the disease to die out, while, on the coutrary, it has, during the present season, taken a much firmer hold of the Northwest Provinces than before.. It has become much more widespread in the Punjab, the strenuous efforts to confine it to the first infected districts having failed owing to the fatalistic obstruction of the ignorant villagers who, by means of rioting have forced the Government to abandon the more effective measures of evacuation of the villages. Fortunately the maximum seasonal prevalence of plague in India only lasts 3 months of the year, while during the remaining months the mortality is small and the disease sporadic, so that before long it will probably be regarded as an endemic disease with epidemic periods like cholera and malaria, only causing but a tithe of the victims claimed yearly by the latter affections.—*American Medicine.*

Resistance to Disease of the Composite American.

I may safely be assumed that the most important element of infection is the resistance of the individual. The inherited transmission of this resistance has been made the object of some futile experiments, which, judged superficially, seemed to negate its possibility. But we know. if only from the standpoint of evolution, that there is a hereditarily transmissible, specific resistance to disease—a comparative immunization at least, in its broadest sense. The relatively high resistance of the negro to yellow fever is a case in point.

Hereditarily acquired resistance to disease depends for maintenance upon exercise just as does any other hereditarily acquired characteristic. As the arts of war are forgotten in long periods of peace so the very prevention of a disease, by extraneous means, makes the organism more susceptible to that disease. The longer the freedom from exposure the less the specific resistance. Quarantines are only flags of truce after all; the battle must be fought eventually. The varying severity of epidemics is probably due more to variations of the resistance than to variation in the virulence of micro-organisms. The life cycle of bacteria and protozoa is so short and they are so responsive to environment, that it is to be doubted that they have any considerable fidelity to types of virulence.

The tendency of mankind, through the mixing of the races, is toward a homogeneity of resistance superior, on the whole, to that of its forbears, yet inferior to that of some of them for particular diseases. The composite American has acquired not only new resistive factors from his mixed ancestry, but also some new susceptibilities to diseases which were unknown to the pilgrim fathers. He has so altered the climate by his destruction of the forests that he no longer inhabits a temperate zone, but an arctic zone in winter and and a torrid zone in summer, thus inviting the sicknesses of both.—*St. Louis Medical Review.*

Beta-Eucain.

In the course of a very elaborate paper entitled "L cal and Regional Anaesthesia with Cocain and other Analgesic Drugs, including the Subarachoid Method, as Applied in General Surgical Practice," Dr. Rudolph Matas, of New Orleans, Professor of Surgery, Medical Department, Tulane University of Louisiana, states that since the introduction of Beta-Eucain, which can be used in relatively concentrated solutions without fear of toxic effects, the neuroregional method of anaesthesia has been so perfected that a maximum effect can be obtained with a safe minimum expenditure of the drug. There is a decided tendency noticeable at the present time to depend more upon the action of the analgesic drugs than upon the physical or mechanical effects of the infiltration process itself.

Latterly, since using the special injection

apparatus which he describes, Dr. Matas has almost exclusively employed Beta-Eucain for the deep infiltrations (Le Grand and Joanin). The fact that it is itself mildly aseptic, that it can be sterilized by boiling, and that it is 3.75 times less toxic than cocain (5 times less toxic according to Vinci), make it especially valuable for large infiltrations. It is not, according to Dr. Matas' experience as affective as cocain when used in the same proportions; but in relatively stronger solutions it is equally powerful. A 2 per cent. solution is nearly as effective as a 1 per cent. cocain solution: and since it is possible to use as much as 50 to 60 cgm. (7-10 to 9¼ grains) in one operation (Lohmann), and even more, without the supervention of toxic phenomena, its great value cannot be questioned. After numerous trials he obtained the most satisfactory results in major cases with a solution consisting of 1-2 grain of Beta-Eucain, dissolved in one ounce of isotonic salt solution (8-10 per cent. sodium chloride, Heinze) representing very nearly 1-10 of 1 per cent. of Beta-Eucain solution. Eight ounces of this solution (equivalent to 4 grains of Beta-Eucain), fills the bottle of the injecting appartus, and is more than is usually required for the larger majority of operations. If more is needed Matas does not hesitate to refil the bottle, until the limit of of 10 grains of Beta-Eucain is reached (20 ounces of the solution), care being taken to secure free drainage of the solution in the course of the operation. In very sensitive parts the strength of the solution may be increased to 0.2 per cent., 8 ounces of which may be used for the first infiltration, after which a weaker solution should be employed so as not to exceed the limit of safety. Massive infiltrations of more than 20 ounces are rarely if ever required; but if they are, much latitude is allowable to a judicious operator, who will be guided by the loss which is likely to take place through drainage during the course of the operation. Such large infiltrations may be required for the extirpation of carbuncles and large neoplasms, amputations, etc. All that is necessary is to bear in mind the amount that is likely to remain permanently in the tissues and be absorbed, and to see that this does not exceed 5 grains, though experience has demonstrated that 8 to 10 grains are well tolerated.

The author dilates upon the importance of rigorous asepsis as regards the injection, and more especially the sterilization of the fluid employed. He then proceeds to consider the various methods of mixed or combined anaesthesia.

Thus for the removal of large tumors of the neck, carbuncles, etc., in which the circulation of the region cannot be readily controlled, he employs the cocain solution for the infiltration of the most sensitive parts of the field of operation, such as the skin, and depends upon Beta-Eucain in 0.2 per cent. solution for the general edematization of the remaining and less sensitive areas. He also systematically uses the combinations of anaesthesics in operations upon the bladder, in which the topical application of strong local anaesthetic solutions is required to anaesthetise the sensitive and inflammed mucosa. This occurs most frequently in suprapubic cystotomy for stone, or for the relief of prostatic obstruction. In these cases he literally employs a 4 per cent. Beta-Eucain solution after the preliminary cocain injection, allowing them to remain in the bladder. The procedure is the same in the performance of litholapaxy after Chrissmore's method, which he has done seven times with six complete successes in the last two years, employing 4 to 6 ounces of a 4 per cent. Beta-Eucain solution.

Dr. Matas has also employed Beta-Eucain for spinal subarachnoid anaesthetization, using 1 cc. (15 minims) of a 1 per cent. solution after the flow of cerebrospinal fluid has been clearly demonstrated. The needle, with the syringe attached, was left in situ pending observation of the anaesthetic phenomena, for further inspection. He found, however, that in the same doses as cocain, the anaesthetic effects did not appear. He calls attention, however, to the toxic effects of cocain which may show themselves immediately during the acme of the anaesthetization, but are more constantly seen during the post-anaesthetic stage some twelve hours later. Racoviceanu-Pitesci, whose experience is almost as large as that of Tuffier, said at the important discussion which took place at the recent International Congress in Paris, that he knew of two deaths which had occurred in Roumania as the result of spinal cocainization; in eighty of his cases he had observed light intoxications persisting for four or five days, and in three he had grave and alarming accidents. The experiment of the Roumanian surgeons distinctly sustains Prof. Bier, in the very conservative and guarded attitude that he has maintained since he first used the method for surgical purposes in 1898.

In his paper (Munch. Med. Woch., 1900, xxxvi, p. 1226), Professor Bier holds that the problem is not to use cocain in the manner which he first described and for which he predicts no great future, but to devise means of rendering cocain harmless and to prevent its unpleasant and after-effects, or

to discover some non-toxic substances. He says, with Tuffier, that the doses of cocain should not exceed 15 mgm. (¼ grain).—*The Philadelphia Medical Journal*, Vol. VI, No. 18, November 3d, 1900.

At the meeting of the American Surgical Association, held in Baltimore, Md., May 7th, 8th, 9th, 1900, Dr. R. Matas, of New Orleans, read a paper on "The Treatment of the Arteriovenous Aneurisms of the Subclavian Vessels," and reported a case of bullet injury occurring in a man aged twenty-four years, in whom the right subclavian artery and vein had been perforated through the scalenus anticus. The bullet had also injured the brachial plexus, causing paralysis of the corresponding upper extremity. The operation was performed ten days after the injury. An osteoplastic resection of the clavicle with disarticulation at the sternoclavicular joint was made under local infiltration anaesthesia with Beta-Eucain, and a temporary traction loop of silk was applied under the first portion of an anomalous subclavian artery, the innominate being absent. The vein was provisionally compressed above and below the anastomic orifice. Notwithstanding complete control of the subclavian at its origin, profuse hemorrhage took place from the anastomotic orifice when the vein was detached from the artery, the bleeding stopping when double ligatures were applied above and below the perforation in the artery. The bleeding indirectly came from the vertebral and internal mammary. After dividing the artery between the ligatures, the orifice in the vein was closed by lateral suture, and the venous circulation was re-established. A bullet, undeformed, 38 caliber, was extracted. Shock followed, but patient was restored by saline infusion. Recovery with partial loss of hand and forearm from mortification, caused by arterial ischaemia and insufficient collateral circulation. Primary healing of operative wound. In reviewing literature of the subject the author referred to fifteen cases of this rare injury which had been recorded since 1829 when Larrey described the first case. Of these, only four had been operated upon. The indications for intervention, the prognosis and details of the operative technic closed the paper.

Dr. Matas also exhibited an apparatus which he used for local infiltration anaesthesia. It consisted of a metallic (sterilizable) cylinder provided with an accessory gauge which indicated the level of the fluid within. The cylinder (capacity 8 ounces) was filled within a weak Beta-Eucain solution (1-5, 1-10 and 1-100 of 1 per cent.) and was charged with a small air pump, which forced the fluid into the tissued by simple pneummatic pressure. After charging the cylinder the pump is detached, and the cylinder is connected to the needle and tubing by which the fluid is injected into the tissues. The advantages of this apparatus are, that it facilitates the introduction of large quantities of anasthetic fluid (Beta-Eucain dissolved in 8-10 of 1 per cent. solution) and completely edematizes the field of the operation by a process of almost continuous infiltration and without the interruptions caused by the frequent changes of the ordinary syringes. It is especially advantageous when massive infiltrations over large areas are indicated with extremely weak solutions, which anaesthetise the tissues by their physical action alone rather than by the chemical analgesic action of the drug.

He had used the appliance all of the past winter, and had been much pleased with the results obtained in a great variety of operations, many of which without its aid would have been entirely beyond the scope of purely local anaesthesia. It is also the most satisfactory apparatus that he has used for extentive hypodermoclysis in shock, hemorrages and other conditions in which it is desirable to inject rapidly a large quantity of physiological salt solution under the skin.—The Boston Medical and Surgical Journal, June 20th, 1901.

The Effect of the Danyz Virus on Rats.

Apropos to the above the recent experiments by Rosenau on the Danyz virus for the destruction of rats, in the hygiene laboratory of the Marine Hospital Bureau, are less encouraging. The rat, as we now well know, is a special plague victim, unfortunately for us as well as for himself, and he has the peculiar habit of developing the disease and introducing it to mankind. Anything, therefore, that can lessen this possibility is to our advantage; one of the most obvious ways, if practicable, would be to find some disorder that could decimate or extirpate these parasites and would be harmless to man. Such a one appeared to possibly exist in the Danyz culture of what seems, from Rosenau's study, to be the bacillus typhi murium of Loeffler, a microbe frankly pathogenic for certain smaller species of the Muridae, the common house mouse and others. It was naturally inferred, therefore, that it might also have similar effects on the larger species, and Danyz, by a patient cultivation of the organism, claimed he had produced the desideratum. Rosenau's experiments, however, made on caged animals under specially favorably conditions for infection, do not

justify those claims. We find that only the ingestion of large amounts of virus by the rodents is fatal, and smaller quantities are uncertain and often produce an immunity to even extreme doses. The infection has but feeble power of propagating itself from rat to rat, and this true its efficiency is in a great measure lost. In many respects it acts like a chemical poison, with the advantage that it is harmless in men and domestic animals, so far as known, and with the disadvantage that it produced an immunity. It is evident, however, that we will have to look farther for an efficient ally in our crusade against that objectionable rodent, the rat.—Journal of the American Medical Association.

Health and Mental Strength Compared.

"Has the healthiest student the best mental equipment?" is the question which has been raised at the board of education. The answers have been so varied that the only question seeming to remain is whether the healthiest students from the normal school were given a mental test which was not in accordance with the lessons they had received at the normal school. There were 320 students from the normal school this year who expected to be made cadets in the public schools. An examination had to be held, however, outside of the tests in the normal schools, because only 150 of the students could be placed as cadets. The 150 getting the highest marks were to be placed at once. Fred W. Smedley, director of pedagogical investigation, reported that the students from the normal school showed the higest physlcal development. He also said that the healthiest students also passed the best mental examinations. Yet when the mental test was held, the highest number of marks out of 100 made by these healthy students was about 72. The question then arose as to whether the examination had been based higher than the work done by the student in the normal school.—Medical News.

Labor Pains Stimulated by Mucous Colitis.

Thoyer-Rozat remarks that Budin and Bouchard have already noted how mucous colitis in pregnancy and the purperium involves serious complications and leads to errors of diagnosis. He relates a case where a primipara was seized during the seventh month with abdominal pain. Several attacks of diarrhœa had occurred during the pregnancy. On this occasion the uterus was felt to contract at each pain and effacement of the cervix was beginning. The patient was kept at rest, balladona was given by the mouth and opium by the rectum. On the next day the pains continued with fever and vomiting. Then it was found that the uterus did not contract at each pain, whilst above it, along the tract of the colon, lay a tender, painful area. A purgative was given, and in consequence a very painful action of the bowels occurred, abundant masses of mucous casts passing. More were evacuated after the administration of purgatives for several days. Gradually the intestinal mischief settled down and pregnancy continued till term. Thoyer-Rozat attributed the contractions of the uterus at the beginning of the attack to absorption of intestinal toxins into the blood through the vessels of the colon.—British Med. Jour.

Infantile Pneumonia.

In the Medical Press and Circular for August 28, 1901, a new symptom for pneumonia in children is described. The writer says:

All physicians dealing with infantile diseases have recognized the difficulty of diagnosing pneumonia in the early years of childhood. We need not repeat for our readers the symptoms of the disease or tell how prone the disease is to be overlooked until too late, or enumerate the diseases for which it may be mistaken; such information is to be found in every good text-book on infantile diseases. Unfortunately students are taught nothing of infantile troubles, and the young practitioner soon finds how insufficient has been his training when he comes to attend children. It is a revelation to him to learn that a child may die of pneumonia without showing any of the symptoms of the disease that he is so familiar with in the adult patient. Even to those familiar with the diseases of early life the recognition of pneumonia is not always easy, and the profession should be grateful to M. Weiss, of Lyons, who described a sign of the disease in infancy which he has been acquainted with for months past. He finds that there is deficient expansion of the intra-clavicular region of the effected side. From his account the sign is pathognomonic. He has sought for it in other thoracic troubles in vain. It is not to be confounded with the want of expansion of the whole side, which is found in pleurisy and pneumo-thorax. The pheumonic sign is limited to the infra-clavicular space, and with it is found somewhat less than normal expansion over the site of the lesion. What adds to the value of the sign is the fact that it appears at the beginning of the attack, being well marked before the fifth day. To get the sign clearly it is recommended to strip the little patient and place him on the

broad of his back, and when the excitement of the child at being undressed has passed off and the breathing has become normal the difference in the movements on the right side of the thorax will be readily seen. Care must, however, be taken not to confound the elevation of the clavicle with pulmonary expansion. The differential diagnosis between meningitis, typhoid fever, and influenza from pneumonia is greatly facilitated by this sign. It is also of much vaule in recognizing the onset of pneumonia in children worn out with the wracking cough of pertussis—a danger not unfrequently unnoticed until the impending death calls attention to it. Considering that every general practitioner of medicine numbers many children among his clients, it is an amazing fact that the medical student is taught nothing of children's diseases, and gets his qualification without being asked one question on the subject.

Abscess of Uterus after Abortion.

Brindeau (L'Ostetrique, May 15th, 1901) writes of a woman who was admitted into hospital on the evening of January 31st, having been delivered in the afternoon of an embryo two months and a half old. The abortion was attributed to a fall. The patient was very weak, with a dry tongue, small pulse, and high temperature. The abdomen was painful, but not tympanitic. Two days later the abdominal pain persisted, and there was fœtid vaginal discharge. The curette was employed, but only a little broken-down tissue was removed. The woman died on February 4th. On opening the abdomen in the pathological theatre a great quantity of pus escaped. The peritoneum and pleura were lined with false membranes. The pelvic cavity was full of pus, containing streptococci and the bacillus coli. On the anterior aspect of the uterus, which was as big as at the second month of pregnancy, lay a swelling as big as a hen's egg. Dark pus escaped through a minute orifice in its wall. The abscess, for such the swelling was, had developed in the middle of the uterine wall, and a small track was found running between the tumour and the uterine cavity—clearly a perforation made by an instrument.—British Medical Journal, Aug. 31, 1901.

There are about 2,500 hospitals and asylums in the United States. These give employment to 65,000 people and pay over $23,000,000 in salaries. These hospitals have 300,000 beds, are attended by 37,500 physicians, and treat over 1,000,000 patients during the ysar.

The Medical College of Virginia.

The Medical College of Virginia was organized in 1838 by Doctors John Cullen, Augustus L. Warner, Thomas Johnston, Lewis W. Chamberlayne, Richard L. Bohannon and Socrates Maupin, under the name of the Medical Department of Hampden-Sydney College, and was the first medical school to stem the tide of students then going by thousands to Northern colleges. Owing to a disagreement between the Governing Board of Hampden-Sydney College and the Professors of the Medical Department, the Legislature of Virginia, on February 25, 1854, gave a charter to the Institution under the name of the Medical College of Virginia.

In the Medical Department of this college there are 12 Professors, 9 in the Dental and 5 in the Pharmaceutical. These are assisted by a large score of instructors, lecturers and demonstrators. The Dean of the College is Dr. Christopher Tompkins. The attendance at this college has increased largely within the past ten years. The school has made extended inprovement and is to-day one of the best institutions in this country.

On the Treatment of Meningitis with Unguentum Crede.*

In the Southern California Practitioner of August, 1900, Dr. H. G. Brainerd recounts the history of a case of undoubted tubercular meningitis which he had cured by the persistent inunction of the Unguentum Crede. This encourages me to record three cases which occurred in my own practice. I am an ardent advocate of the Crede Silver treatment, and I believe that it is being more and more used. I have employed it in the most varied infectious diseases, erysipelas, phlegmon, lymphangitis, furunculosis, periostitis, suppurations of the accessory cavities of the nose, recurrent endocarditis, rheumatism, and infectious eye diseases such as corneal ulceration with hypopin, threatened panophthalmitis, etc., but in no affections have I obtained such decisive results as in meningitis, more especially in children. Of fifteen cases of the kind treated with mercurial ointment, calomel, and the iodide of potassium, as well as hydropathic measures, only one survived; whilst all of the three last, treated with the Unguentum Crede, recovered. The diagnosis was made as carefully in the one set of cases as in the other; neither were these

* By Dr. F. Daxenburg, of Regensburg. (Abstracted from the Klinisch-therapeutische Wochenschrift, Vienna, May 12th, 1901.)

latter less serious or of better prognosis. Their history was as follows:

Case I. On July 20th, 1898, I saw a boy aged five years in consultation. He lay unconscious, in convulsions, with pale, distorted and sweating face, boring his head into the pillow, grinding his teeth terribly, and screaming occasionally. The respiration was irregular, the temperature 40.2 deg. C. (104.4 deg. F.), the pulse about 130 and dicrotic. Spasmodic movements of the limbs, face, mouth, and eyes occurred continually; the pupils were dilated and did not react to light. The reflexes were increased, the muscles peculiarly rigid, and Trousseau's phenomena, the taches meningitiques, were plainly visible. The diarrhœal stools and the urine were evacuated involuntarily. Raising the boy in bed caused violent pain, the muscles of the neck and back being absolutely rigid. It was, in fact, a typical case of meningitis. The boy was an epileptic. He had looked very badly for a few days previously, his sleep had been disturbed, and he had fallen frequently whilst walking. Three days before vomiting and fever had set in, soon followed by convulsions and unconsciousness. The father was addicted to alcohol and was neurasthenic; and the mother affirms positively that he was drunk at the time that the child was procreated.

In view of the epilepsy the prognosis was very grave. This was the first case in which I employed the Unguentum Crede. I prescribed 3 grams (45 grains) of the ointment, directing that that amount be thoroughly rubbed into the skin of the two arms and feet alternately for fifteen minutes night and morning. Besides that I ordered an ice-bag to the head, moist compresses for the limbs, a size bath at 24 deg. C. (72.2 F.) with douches at 18 deg. C. (64.4 deg. F.) to the neck and back twice daily, and a suitable tonic diet. By the next day the fever had sunk to 38.5 deg. C. (101.3 deg. F.) and the boy, who, with small intermission, had been entirely unconscious for three days, recognized those around him, and was quieter, having fewer convulsive seizures. After five days more, during which time 12 grams (2 drams) more of the Unguentum Crede were employed, the inunctions being made once daily only, all the dangerous symptoms had disappeared. The temperature was 37 deg. to 38 deg. C. (98.6 deg. to 100.4 deg. F.), the pulse 70 to 80, the convulsions had ceased, and the patient took food again. He still screamed occasionally, however, more especially at night. During the ten days that followed he recovered his health completely and became as he was before. Contrary to our expectation, the epileptic attacks appeared less often and less violently after the meningitis was cured. The boy goes to school now, and has had only one real attack during the past year, though he has had petit mal several times. He shows plainly the so-called epileptic stigmata, the degeneration signs of the skull, teeth, palate, and ears.

Case II. A well-nourished and previously healthy girl of two and a half years suddenly fell sick with fever and vomiting on June 28th, 1899, followed by convulsions and unconsciousness. The child when I saw her in the evening was soporose; occasionally she sighed deeply or screamed, grated her teeth, clutched at her head with her hands, and had clonic spasms of the upper extremities and the face. The breathing was rapid, arythmical, and sometimes of the Cheyne–Stokes type; the pulse 130 to 140 small and irregular; and the temperature 40.5 deg. C. (104.9 deg. F.). The abdomen was retracted and tense, and the patellar reflexes were very vigorous. The slightest touch of the skin caused the most violent tonic and clonic convulsions. The neck and back were stiffened, and the least contact with them caused the expression of extreme pain. The muscles were rigid and the pupils dilated and fixed.

The treatment consisted in the application of an ice-cap to the head, a sitz bath at 24 deg. C. (75.2 deg. F.), twice daily with cold douching of the back and neck, injection for the constipation, and five doses of 2 grams (30 grains) of the Unguentum Crede, to be inuncted vigorously twice daily for a quarter of an hour. In spite of the employment of stimulants the unconsciousness lasted eleven hours. Then the child awoke and took some food; the convulsions ceased, and the temperature sank to 38.8 deg. C. (101.8 deg. F.). Next day the temperature was normal. The treatment was continued; and on July 4th, the eighth day, I could already discharge the child from observation, as all the danger had passed. Two years have elapsed since then, and the child is entirely healthy and well developed both bodily and mentally.

Case III. This was a girl of five years, rachitic, who had had convulsions two years before, supposedly from ingestion of fat meat. The child had been tired and restless at night for several days, and had let things drop from her hands; on July 13th, 1900, whilst on an excursion into the country on a hot day, her legs refused to support her, and she had to be carried home. On the next day she could not stand up, had headache and violent pains in the limbs. She lay stiff in bed in tonic

contraction, which was only rarely varied by slight clonic spasms of the extremities. She anxiously avoided the slightest motion of the body, frequently clutched at her head and cried out. Her head was firmly held backward, her face drawn and anxious, and her gaze was fixed. The pupils were moderately dilated, unequal, and hardly reacted to light. Her mouth was spasmodically closed, so that nourishment could scarcely be administered; her teeth chattered occasionally. Consciousness was only absent at intervals, and for short periods of time, a quarter to half an hour. The breathing was somewhat rapid and superficial, pulse 60 and a little irregular; the skin reflexes were weakened, and the patellar reflex abolished. The lower limbs could not be actively flexed, and sensibility in these locations is so disturbed that deep needle-pricks caused no pain in places. The child could not sit up; raising caused her violent pain, especially when the slightest pressure was made on the spinal region. The bowels were confined. Temperature was 37.8 deg. C. (100 deg. F.).

A package of Unguentum Credé containing 3 grams (45 grains) was inuncted twice daily for the first two days longer once a day. Besider this I ordered the Winternitz ice-cap, a cold Leiter coil to the back, sitz baths as in the other cases, and daily rectal enemata. Vomiting occurred only on the next days, and the rectal temperatures of 47.6 deg. to 38.2 deg. C. (99.6 deg. to 100.8 deg. F.) that then set in lasted for eight days before they finally disappeared. The muscular stiffness and trismus gradually ceased, as did the pains in the head and legs; the pulse became more frequent, and the paralytic symptoms and sensory disturbances improved. The hydropathic measures were continued, and gentle massage of the extremities was gradually added to them. By August 4th the patient could leave her bed and make the first attempts to walk; on the 8th she was discharged. She is now completely recovered, and there are no traces left of her severe affection.

There can be no doubt of the diagnosis of meningitis in all three cases, though the disease pictures are so different. In the first case the epilepsy might have been the manifestation of exascerbations of a chronic, possibly tubercular meningitis. In the second there was probably an acute and possibly purulent meningitis of the convexity. The third case looked somewhat like a tetanus, but the cerebral symptoms, the paralyses and sensory disturbances would exclude it. It was probably an ascending meningitis in which the spinal meninges were first chiefly affected; so that the pains in the limbs, from pressure upon the posterior roots, the paraplegia, and the sensory disturbances antedated the cerebral symptoms.

Tubercular meningitis cannot be positively excluded in any of the three cases; experience teaches that 80 per cent. of all meningites of children are of that variety. An exact ophthal moscopic examination could unfortunately not be made in any of the cases.

The effects of the treatment was throughout remarkably good, and I do not think that it can be ascribed to any other agent than to the Unguentum Credé that was employed. Almost every one of the other cases terminated fatally under the usual medicinal and other treatment. I therefore believe that a certain specific action is to be ascribed to the Unguentum Credé in meningitis, both of the ordinary and the tubercnlar form. Even if we do not deny a possible good effect to the hydropathic procedures and the general hygienic, tonic, and dietetic measures that were also employed, they were certainly of subsidiary importance. I have been able to convince myself frequently befor I began to employ Unguentum Credé that, alone, they do not suffice to prevent a fatal issue. I can not ascribe the brilliant results that followed the use of the ointment to chance alone.

As regards the method of its employment, from 2 to 3 grams (30 to 45 grains) at a dose, in accordance with the age of the patient and the severity of the case, were inuncted in the same way that mercurial ointment is employed, at first twice and then once a day. Altogether some 10 to 20 grams (2½ to 5 drams) were usually sufficient. I do not think it wise to apply the ointment directly to the patient's head, neck, or trunk, if only on account of the pain thereby entailed. I prefer to employ the four extremities in turn.

The chief condition of success lies in the correct employment of the ointment, and want thereof seems in many cases to be dependent upon its improper use. The quantity employed must be suitably warmed, and then be thoroughly inuncted. Almost every trace of the salve must be made to disappear, and this takes at least a quarter of an hour. The nurse must be shown how to make the first inunction, or at all events it must be watched; mere dependence upon the attendant's statements is liable to be the cause of unintentional deception. A mild dermatitis is no indication for stopping the course of inunctions. I have never encountered any intoxication symptoms.

The first sign of the effect of the silver inunctions is a fall in the temperature; then the symptoms of motor irritation remit. The baths above mentioned help the absorption of the silver greatly, besides having a favorable and tonic effect upon the entire nervous system. The Winternitz cap or the ice-bag, and the cold tubes applied to the back, diminish the pains and quiet the patient, and so also do the cold compresses to the extremities. The general hygienic and dietetic measures, and the stimulants, such as wine, tea, and brandy, are excellent, and not to be underestimated. I have entirely abandoned the use of general wet packs.

It is possible, of course, that the procedure here recommended may occasionally not give the desired result; but the Silver Ointment is certainly worth a trial in hopeless cases, and the purpose of this paper is to encourge its employment.

Recent Progress in Bacteriology.

The most brilliant achievements in any branch of medical science in late years can certainly be credited to the bacteriologists, and the mass of practitioners has come to look to them almost exclusively for new, startling and valuable information. Many in the front rank, however, are disposed to doubt the probability of much further progress along this line, and there are even signs of a reaction in the estimate of value of bacteriologic discoveries. In the August number of Medicine, D. H. Bergey, of the University of Pennsylvania, recapitulates in part the advancements of the past twelve months.

Pure bacteriology has added somewpat to the knowledge of the morphology, biology and biochemical characters of bacteria, especially with reference to the character of bacteria, especially with reference to the character and significance of the so-called polar granules of Ernst. Marx and Woithe, of Berlin, have found that these polar granules are dependent upon the character of the nutrition in the cell, and they believe that the organisms in a culture containing these granules are the preservers of the species and contain a special form of protoplasm.

Gildersleeve has done considerable work with the so-called branching forms of tubercle and diphtheria bacilli. The consensus of opinion seems to be that these are merely sprouts from the polar granules of Ernst, and refutes the contention that the species presenting this appearance are related to the mycelial forms in plants.

The nature and mechanism of immunity has received considerable attention at the hands of Emmerich, Loew, Morgenroth and Ehrlich. It has been demonstrated by Emmerich and Loew that pathogenic bacteria are capable of producing proteolytic enzymes in the test-tube as well as in the animal body, and that there enzymes are capable of disolving (digesting) the protoplasm of the bacteria producing them. They call these immunizing enzymes "nucleases." During the past year they have been able to prepare, by artificial means, an antitoxin of great efficiency against swine plague. On the other hand, Ehrlich and Morgenroth have further elaborated Ehrlich's and "side chain theory," so designated because the toxins are believed to unite with one or the other of the side chains of the complex chemical substance composing the body cells. Ehrlich has shown that the action of immune sera upon bacteria is analogous the hemolytic action of specific sera upon blood-corpuscles, a chemical, not a digestive action.

Feisser and Wechsberg have found that staphylococci produce a soluble toxin which is very closely allied in itts constitution to that produced by the diphtheria and tetanus bacilli. It contains two distinct poisons, one hemolytic for red cells, the other destroying leucocytes. A variable quantity of staphylococcus antitoxin pre-exists in the blood of human beings, and the uope is held out that an artificial specific antitoxin may be produced.

It has been learned that the Widal reaction occurs with blood dilutions as great as 1 to 50 in anomalous conditions such as anemia, chlorosis, leukemia and pseudo-leukemia.

Inoculatian of dead typhoid cultures has provided successful in South Africa in the immunization of English soldiers and nurses against typhoid fever. In the case of the nurses the danger of infection seems practically to have been climated.—*St. Louis Medical Record.*

Treatment of Piles.

Dr. Pir, of Jodhpur. India, in a short article in the Indian Medical Lancet says:

I have employed the following ointment in many cases of piles with the happiest results, and hope that all medical men will try it in their practice and publish the results.

℞ Gandaberoza (a common native medicine) Butter aa ʒiii

Dissolve the body over a fire in a gallipot, when they will liquefy; strain through a fine piece of muslin into a wide-mouthed bottle and keep it in a cold and dark place. At the termination of two or three hours it will become semi-solid.

Method of Employment for Internal Piles.—A little cotton wood soaked in the ointment should be introduced into the rectum and repeated thrice daily.

For External Piles.—A little cotton soaked in the same should be placed on the piles, then gutta-parcha tissue, cotton and bandage dressing; must be reapplied every twenty-four hours, or after each motion.

The application of the ointment causes neither burning nor irritation. Eight day's use will afford great relief to both internal and external piles. A notable cessation will appear in the size of the piles. Tension and pain will vanish. If it is used in external piles for about four days, the malady will never recur. All medicines and diet which induce constipation must be avoided.

Medical Men and Public Affairs.

We have often expressed our regret for the rarity with which the men of our profession take any prominent part in public affairs—affairs which, so far as they concern the interests of medical men or the efficiency of the public military services, cannot safely be left to untutored legislative bodies. In saying "untutored" we do not mean to imyly that legislators are commonly deficient in general information, but that when it comes to technical matters they are necessarily in need of the special information which only persons of technical training can furnish. We do not think that legislative bodies take a special delight in degrading or underrating medical administration, though appearances sometimes point to the contrary, as in the recent reorganization act by which Congress did actually degrade the medical department of the army. In its issue for August 10th the Medical Record said: "In the judge advocategeneral's department—the lawyer's branch of the military service—for example, the new law authorized the appointment of lawyers from civil life from receiving until after more than a quarter of a century of hard service." Commenting on the Record's article, the Army and Navy Journal for August 24th said: "To make a comparison between the treatment given to lawyers in the judge advocate general's department and that given to doctors as an evidence of designing discrimination is, we think, to do an injustic both to Congress and to the medical department. Lawyers are noted for their persistence in securing legislation in their own interests; physicians are equally celebrated for indifference in such matters. The doctor is not a lobbyist; the lawyer is." Our military contemporary goes on to remark that lawyers abound among the members of Congress, while doctors are few, and it thinks that, if there had been in Congress as many doctors as lawyers, the medical profession would have met with as intelligent treatment as the legal. "Our army doctors," it adds, "have not been an assertive body. When the means placed at their disposal for a certain task have been inadequate, even glaringly so they have gone quietly ahead to do the best they could in the circumstances, instead of becoming noisy Oliver Twists and clamoring for more. It is perhaps this ability and willingness to do much with little that has caused their status in the reorganization bill to be affected to their detriment."

The Army and Navy Journal's appreciation of the work of the medical corps of the army is most gratifying, and we should be glad to see a goodly number of medical men in Congress. We do not expect such a state of things, however, at least in this generation, and we do not believe it is necessary for physicians to be members of a legislature in order to guide legislation. Ordinarily the essential features of Congressional action are settled upon in committee meetings, and medical men need not be members in order to exert a decided influence in shaping the results of committee-room deliberations, as was notably exemplified on more than one occasion by the late Dr. John B. Hamilton. It is not enough that anybody attempting to follow his example should be well-informed, honest, and earnest, as we believe all the high officers of our governmental medical corps to be; he must, in addition, be possessed of the special tact that makes the diplomat. There must be such men in the medical corps of the army, in that of the navy, and in that of the Marine-Hospital Service. Officers of each of those corps are constantly stationed in Washington, and we believe it would serve an excellent purpose if those assigned to duty in the national capital were chosen with particular reference, other things being equal, to their diplomatic ability. Such a policy, it goes without saying, would in no wise be incompatible with the efforts of medical men in civil life to guide Congressional action, and we do not believe that it would be at all detrimental to the efficiency of any one of the three corps mentioned. It is manifest that the medical profession ought to have much more influence than it has in shaping public affairs, and it rests only with itself to attain such influence. Let us no longer be "celebrated for indifference in such matters."—*New York Medical Journal.*

Indications for the Radical Cure of Hernia in Children.

J. N. Bartholomew (The Chicago Clinic, Vol. xiii, No 6) says:

Herniæ in children are most frequently of the oblique inguinal variety, are easily closed and promise a better prospect of cure, with less liability to recurrence than in the adult.

Of all the cases occurring in children, eight per cent are not suitable for truss-treatment.

Trusses are not well borne by children, and are difficult to manage, and nearly fifty per cent of cases submitted to truss-treatment are still uncured at the end of three years.

Herniæ cured by truss-treatment during childhood frequently relapse after adolescence.

Generally speaking, the best time for operation is just before the child assumes the upright position, and mechanical treatment should not be perserved in after this time unless there is marked diminution of the size of the hernial openieg.

The indications for the radical cure of hernia in children are:

Cases complicated with hydrocele.

Irreducible, incarcerated, and strangulated herniæ.

Cases in which the hernia can not be kept up by a truss without much discomfort to the patient.

Cases unable to obtain the care requisite to successful mechanical treatment.

Cases in which mechanical treatment has been faithfully tried without benefit.

Pulmonary Tuberculosis as an Insurance Problem.

Chas. Lyman Greene, of St. Paul (American Medicine, Aug. 17, 1901).

The present requirements of a majority of our insurance companies and the usual methods of insurance examiners are not sufficient to exclude persons suffering from incipient or arrested tuberculosis.

Improper preparation of the patient is a fruitful source of error, and should be covered by specific instructions, and direct inquiry, as is now done in but few instances.

Light weight in an applicant should lead to careful scrutiny in every case, and suggests an afternoon appointment for temperature determination.

Heavy-weights cannot be accepted at their face value.

Recent loss of weight is suggestive and important. It is important that the "best" weight should be stated. No blank known to the writer contains the latter inquiry.

Hoarseness should arouse suspicion and be met by postponement until recovery.

The determination of the body temperature is extremely important, and its present neglect inexplicable.

The physical signs of tuberculosis are obscure and require skill and judgment, both in their detection and the weighing of their importance.

A knowledge of the normal chest is all important.

Unilateral hyperresonance is as important as unilateral dullness, and absence of the normal breath-sounds no less significant than the presence of abnormal sounds.

Broadly speaking the examiner must rely more upon auscultation than percussion.

The tuberculin reaction and demonstration of tubercle baciili in the sputum are impracticable measures, save in the case of substandard lives.

Greater stress should be laid upon the question of direct infection, and specific questions in relation to environment should be inserted in every blank.

St. Louis's Typhoid Rate.

Chicago experts assert according to the New York Medical Journal that the impurities in the St. Louis water supplies come from Kansas City, some 350 miles distant, according to the course of the Misssouri. Tests, it is said, are to be made and vital statistics examined, to show the connections between the typhoid death rate of St. Louis and those of Kansas City and Missouri River towns on one hand and Peoria and Illinois River on the other.

Dr. Teichmann has forwarded to City Counselor Schumacher a letter, calling attention to the increase of typhoid fever in St. Louis in the past three weeks, and suggesting that a meeting be held immediately to arrange for the commencement of work under the appropriation of $25,000, which will become available in a few days. Dr. Teichmann states in his letter that the number of cases of typhoid fever reported to the board of health has shown a rapid increase of late. The week before last twenty-three cases were reported, and last week forty-six cases. The cause of the increase in typhoid, according to the city chemist, is the fall in the volume of Missouri River water and the consequent lack of dilution for the Illinois River impurties.

Mosquito vs. Malaria.

Dr. Herman M. Biggs, of the Health Department of New York, has according to the Medical Times prepared a brief and practical statement of the causations and prevention of malarial fever, following the

lines of recent scientific investigation in respect to the mosquito and its destruction. Professor Crassi is reported as having completed a series of experiments, lasting forty days, near Ostia, with a mosquito serum, which immunized 500 inoculated people.

Dr. Bigg' statement is in part as follows:

Recent investigations have shown that malarial fever belongs to that class of diseases which require for their transmission the active intervention of a definite kind of mosquito, that is, anopheles; this genus is not the common one of this region, but is nevertheless present in many localities.

Certain simple precautions suffice to protect persons living in malarial districts from infection, as follows:

First—Ample screening of the house to prevent the entrance of the mosquitoes (after careful search for and destruction of all those already present in the house) and screening of the beds at night. The chief danger of infection is at night, inasmuch as the anopheles bite mostly at this time.

Second—The confinement and continuous screening of persons in malarial districts who are suffering from malarial fever, so the mosquitoes will not bite them and thus become infected.

Third—The administration of quinine in full does to malarial persons to destroy malarial organism in the blood, and persistence in the use of the remedy, even for a few weeks after apparent recovery.

Fourth—Removal of the breeding place of tbe mosquitoes, through drainage, filling up of holes and surface pools, and emptying of tubs, pails, etc., which contain stagnant water. These mosquitoes particularly breed in surface rainpools and surface stagnant warter, where there are no fish, also exceptionally in pails, tubs, barrels and tanks of standing water, though they seem mostly to prefer natural accumulations.

Fifth—In pools which cannot be drained or filled, destruction of the mosquito larvæ by the use of petroleum, thrown upon the surface, by the introduction of minnows and other small fish, which eat the larvæ, or by both methods.

Cough and Its Traetment in Pulmonary and Laryngeal Tuberculosis.*

In the way of preface, I will say that my apology for bringing this rather trite subject to the attention of the medical profession, is the opportunity I enjoyed through constant personal observation on fifty patients under my care in the course of the last twelve months. Circumstances brought me in quite close, perhaps too close, contact with the above number of tuberculous patients, while in the capacity of physician-in-charge of a sanitarium for the treatment of persons suffering from pulmonary and laryngeal tuberculosis.

Of all the features, phisical and mental, which make up the sum total of a consumptive, cough is the most distressing and prominent symptom, and as such, should engage the mind of the physician to a larger and deeper extent concerning its amelioration and suppression in the treatment of tuberculosis. It is the phychical as well as the physical tormentor of the unfortunate consumptive. It is a well-known fact that tuberculous patients to the exclusion of all others will never admit that they individually are afflicted with this dreadful disease; they are suffering from a "slight cough," which must soon pass away.

"If not for the cough, I would feel perfectly well," say one. "Oh, doctor, if you would only stop my cough, I would not feel sick at all," says another. Hemoptysis, even severe hemorrhages, are quite often forgotten; night sweats, though disagreeable, are seldom the subject of complaints—they would yet consider themselves only victims of a bad cold, which manifests itself in this wretched cough. Though sent by their respective physicians to a sanitarium where only tuberculous patients are treated, yet not entering the institution, they will always ask not to put them in close contact with "consumptives," because they have not this disease; they are only coughing slightly, having contracted a severe cold. This illusion is rather in some cases, especially in incipient tuberculosis very fortunate, as the patient is hopeful of a speedy recovery and struggles energetically for the restoration of his health. Such being the case, our efforts must be directed toward amelioration and suppression of cough, to keep up that favorable illusion.

Again this distressing cough of consumptives, if not checked in some way, wrecks the wasting constitution unmercifully. It deprives them of sleep, which rest is so indispensible for healthy and sick people in general and for those afflicted with tuberculosis in particular.

Cough is very often the cause of retching and vomiting. In the first instance, the afflicted feels wretched; in the second, he is getting exhausted and disgusted with his miserable existence.

Though not by means the sole cause of

*Henry Levien, M. D., ir Buffalo Medical Journal

pulmonary hemorrhages, yet by causing hyperemia of the lung tissues and at the same time interfering with the normal pulmonary circulation, the venous return, cough thus becomes the executor of pulmonary hemorrhages. Paradoxical as it may sound, yet we would entertain an idea that if pulmonary tuberculosis and phthisis in general could have existed without coughing, hemorrhages would seldom be heard of. So far as our observation goes, hemorrhages seldom arise spontaneously This may be the case with the first one, the rather unexpected herald of some trouble, but when the disease is more or less advanced, the hacking dry cough is the unwelcome messenger of the "ruby" as sanitarium inmates, or "lungers" are wont to name hemorrhage, in the way of shortening it, we suppose.

Because of this cough many a patient shuns society and as in the case of sanitariums avoids taking their meals in the general dining room, and if not ameliorated, this condition may lead to dejected spirits and even melancholia. There is hardly any difference as to the stage of pulmonary tuberculosis, so far as cough is concerned. They cough in the first stage, more so in the second, when every inspiratory act is a coughing fit, and still more in the third stage, unless the patient by this time was well taken care of, availed himself of the requisite climatic and hygienic surroundings, which might have been the combined factors in drying up the cavity or cavities.

What are the means at our disposal for suppressing this cough? Do the generally administered pulmonary, or as some would have them, gastro-intestinal, antiseptics like creasote and the many coal-tar and sulphur products tend in some way to diminish the cough? In my experience, they do not. Will oils and fats in general do anything toward quieting cough? They may in a general way and in the long run, so to say. That is in addition to plenty of sunshine in the open air, respiratory gymnastics, wholesome and plenty of nourishment, and hydropathic treatment systematically carried on, they may assist in clearing the bronchi and even the alveoli of the superfluous mucopurulent secretions and thus create a feeling of well being, but by the time this is reached, the patient might be considered as a whole and the cough in consequence; but we need something which would act more speedily and in this way hasten the happy outcome.

Inhalations have their sphere of beneficial action upon inflamed and irritated mucous membranes, but the benefit derived from them is quite temporary, and we would not advise this means as a remedial agent to relieve a distressing cough. Inhalations may subserve in "curing" phthisis, with which we are not concerned in this discussion.

Recourse must then be taken in remedies which would act directly and immediately, without at the same time carrying deleterious effects upon the system as a whole.

Hypnotics or nerve sedatives, like chloral, the bromides and the many coal-tar derivatives, which have their especial value in other conditions, should in our opinion never be administered, because intended as they are for quieting the reflexes in certain nervous affections, will not benefit diseases where positive pathological changes are the sole cause of these manifestations. Besides nearly all hypnotics are cardiac depressants, and such remedies should be administered with special caution if given at all, as the heart's action in consumptives is always below par and requires often a whipping up and stimulating.

Resource must be found then in the class of analgesics and anodynes, and then opium in its different forms heads the list. Considering the different preparations and their salts, chronologically so to say, we learn that opium per se is not suitable because of its constipating effect and undesirable sequelæ left after prolonged use.

Dover's powder was at one time an anchor and used extensively. Pulvis ipecac compound, consisting as it does of opium and ipecachuana, is intended to meet two purposes; to cause slight nausea and thus promote expectoration, then to suppress cough by the opium contained therein. We hardly believe it is suitable as a sedative in pulmonary tuberculosis, for in doses which should be effective, the nausea will exceed its limits and cause vomiting, a very undesirable effect, and the opium will then come in too large amounts for the necessary sedation. It may have its place in coryza, probably in influenza, but not in tuberculosis. Morphia would do away with nausea, but the morphia habit and its after-effects should not be lost sight of and, therefore, should also be relegated to other spheres.

Codeine kept its place in therapeutics as an old tried remedy in suppressing or quieting any kind of coughs. It does so, but the constitution gets so used to its effects when it is administered for any length of time, that we must increase the dosage quite often and extensively.

Heroin is a recent addition to our therapeutic armamentarium. We have given it a thorough trial and found it superior to all previously enumerated drugs. This remedy is an improvement upon a modification of

morphia, especially adapted for the treatment of the respiratory apparatus. It does not replace morphia in all cases; it substitutes it in pulmonary affections only. It has a sedative effect upon the respiratory tract, produces restful sleep, does not constipate, and so far as my experience with the drug goes, does not produce heroin habit. My attention was called a few months ago and urgently requested to give its salt, heroin hydrochlorate, a trial, administering it in a weak solution of hydrochloric acid; I thought it did act in a more efficient way than the heroin plain. But with heroin and heroin hydrochlorate administered per se, I had the difficulty in establishing the requisite or standard dosage. Some clinicians have benefitted their patients with very small doses as 1-20 of a grain. Tablets are manufactured in the market in doses of 1-12 gr. In our experience neither one nor the other were sufficient to exert the right beneficial effect, and had to order tablets in doses of 1-8 of a grain, administering one at bed time and during the day *pro re nata*. This seemed to be the proper dose without carrying with it any deleterious after-affect.

In my college days I heard Prof. Wm. H. Thomson repeatedly urging upon us his opinion that a combination of adequate remedies will act better than any single one given in large doses, and following his advice later in my general practice, I believe I reached my ends better and drugged my patients less, because by combining remedies, each is given in smaller doses, especially when narcotics or other poisons are in question. It was with a two-fold feeling that I met a new remedy, or rather a preparation which is a combination of remedies, destined for the treatment of disease of the respiratory tract. I always had misgivings towards new preparations; but as this preparation, glyco-heroin, seemed to me in no sense a patent medicine, having the contents open before the medical profession, I thought it worthy of trial. The combination which makes up the glyco-heroin should appeal to any one who is treating patients afflicted with pulmonary and laryngeal diseases. The composition of glyco-heroin is in our opinion quite a happy one. Each teaspoonful contains 1-16 gr. of heroin, quite a small dose; hyoscyamus, 1 gr., an adequate addition, as it checks night sweats and acts favorably upon reflexes; ammonium hypophosphite, 3 grs., which is an excellent stimulating expectorant without producing nausea; white pine bark, a tonic and a slight antipyretic, with balsam tolu, glycerin and aromatics. A teaspoonful of this preparation, I found to be a definite dose, the effects of which lasted for three or four hours. Two weeks' trial on six patients convinced me of its utility and superiority over heroin and heroin hydrochlorate, administered per se.

My clinical observations in sanitarium treatment of pulmonary and laryngeal diseases cover fifty cases, treated in the course of twelve months, and to make my report on this particular subject quite comprehensive and convincing, I'll have to depart from the generally accepted mode of tabulation and present it in the shape of three periods, corresponding to the time and number of patient when one or the other remedy was administered.

Time. 1900	Number of Patients.	Drug Administered.	Results Observed.
May, June, July, August.	20	7, Pulv. Dover.	Not satisfactory.
		13, Codeine sulph. $\frac{1}{4}$ gr.	Effect upon cough favorable, but the doses had soon to be increased.
September, October, November and December.	14	8 Heroin hydro., dose $\frac{1}{8}$ gr. in acid water.	Quite favorable, but I always felt that dose was too large. Smaller doses were not effective.
		6, Glyco-heroin on trial	
1901. January, February, March, April, May. (part).	16	Glyco-heroin (Smith) very favorable.	

We do not deem it necessary to tire the reader with reports of cases in more detail, but we beg to convey our impression that since we started to administer glyco-heroin to our patients as a routine, directing them to take a teaspoonful at bed-time and during the day as occasion required—severe cases should take a teaspoonful every two or three hours—a decided improvement in the general-being of all was felt. In the course of a few weeks, one would hardly believe it was an institution for, or the

abode of consumptives, whose business is, so to say, to cough. In the stillness of the night, one could hardly discern any hack or even loose cough, and it convinced us that our patients were enjoying a peaceful and refreshing sleep. It is quite grateful to note that after one week's systematic administration of this remedy in conjunction with out-door life, pulmonary exercises and good dieting, the cough, pain in the chest, pleuritic pains and dyspnea are considerably ameliorated and night sweats entirely disappear. We believe it will not be amiss to cite at least one recent case :

Mr. B., aged 20; New York; law student, previously book-keeper and salesman. On December, 1900, he caught a cold, coughed slightly; gave it no attention. On Februrary 1, 1901, had an attack of hemoptysis, which lasted but a few days, and but little attention was paid to it. On March 1 he felt pain in the right side of chest. Next day pain increased; had fever. In the evening, a third attack of hemoptysis, and on the third day quite a severe hemorrhage. This kept him in bed for two weeks and in the early convalescence, Dr. M. Moskievitz, his attending physician, sent him to our sanitarium with the history and diagnosis of tubercular pleurisy and consolidation of the right apex anteriorily and posteriorly. Upon microscopical examination of the sputum numbers of tuberculous bacilli were found. He was suffering besides from cardiac debility and dyspnea, and was so weak that two attendants were necessary to bring him up to the sanitarium.

March 30, 9 a. m., examination after one night's rest: Pulse, 120, slightly intermittent; temperature, 97.8 deg.; respiration, 36; weight, 121 lbs., previous weight, 136. Physical examination: on auscultation, right lung, upper two-thirds anteriorly, suppressed respiration and in areas where respiratory sounds were audible, they were bronchial in character. No respiratory sound posteriorly, owing to serofibrinous exudation and thickening of the pleura. Considerable pain in the same side on respiratory effort. Left lung, shallow repressed respiration with moist crepitant and subcrepitant rales. On percussion, dulness under right clavicle, and very dull, approaching flat percussion note posteriorly below the angle of scapula and axillary line. Vocal fremitus increased anteriorly. Heart wounds apparently normal, a state of cardiac palpitation existing. Sputum examination revealed the presence of tubercular bacilli.

Diagnosis: Tuberculosis upper two-thirds of lung anteriorly and posteriorly. Tubercular pleurisy, slight effusion, thickening and recent adhesions of the right side.

Treatment: Rest in bed; windows open day and night. Local treatment consisted in sponging with tepid water, thorough friction, and application of iodine by painting with tincture iodine. Internally, strychnin for the cardiac debility, malt-phosphate as a general tonic and glyco-heroin (Smith) for the painful cough and pain in the right side.

April 7, cough much ameliorated, sleeps well, not disturbed by coughing spells. Pain in the side almost entirely gone. Respiration twenty-four per minute and without panting on walking. Feeling well and strong enough to take short walks without fatigue. No night sweats; pulse, 100; temperature slightly above normal in the afternoon; gained 3½ pounds in weight.

April 14, continues to improve; hardly coughs at all, dyspnea diminished. No night sweats, no hemoptysis; allowed longer walks, physical signs improving, sleeps well. Weight 127.

April 21, temperature normal. Quite healthy appearance, able to take gymnastic exercises, heart action much stronger. Appetite good; pain in the side disappeared, though the dullness is still noted. Pulse 96; weight 130 pounds.

April 28, improvement continues; hardly coughs at all. Takes glyco-heroin only at bed time. Left lung entirely clear of rales, consolidated areas of right lung gradually diminishing in size: no pain in the side, though respiratory sounds hardly audible as yet.

May 7, no night sweats; doesn't cough; climbs to top of Walnut mountain without fatigue. Pulse 90, full and regular; weight 133 pounds. Effusion being absorbed, a feeling of well being prevails.

I had but two occasions to use glyco-heroin in other than tubercular affections, namely asthma. One case was bronchial asthma of a mechanical nature. The patient was a furrier by trade and whenever he would spend a day in his shop, he would get the attack in the evening; morphia hypodermatically, amyl nitrite by inhalation and other remedies would not control these attacks, which would torment him for hours at a time. On one occasion I administered one teaspoonful of glyco-heroin, repeated the dose in ten minutes and the attack was cut short as by magic.

The other case was one of cardiac asthma in a man 72 years old. He gets the attack mostly on retiring or whenever his feet get cold. He is suffering also from arterio-sclerosis and chronic interstitial nephritis. His attacks were also cut short by one or

two doses of glyco-heroin, and in this I fully coincide with Dr. M. Manges, of New York, that heroin in general and glyco-heroin in particular, should exert a favorable effect on all forms of asthma with the exception of one of dyspeptic nature.

Conclusions—(1) Cough, though one of many features in the make up of tuberculous affections of the lungs and larynx should, however, receive special attention at the hands of the physician, because it is the most distressing and exhausting factor. (2) Of all the remedies and drugs in our experience, which would tend to ameliorate and suppress cough, we find in glyco-heroin an agent which to all appearances is a remedy par excellence, and we recommend its further trial.

Movable Kidney.

Dr. John B. Deaver, in the Philadelphia Medical Journal, says:

To arrive at a correct diagnosis between a movable kidney and post-cecal appendicitis, the following points must be duly weighed. Movable kidney is most commonly met with in nervous women who have gastro-intestinal disturbances. The attacks of pain are associated with nausea, vomiting, fever and chills. The urinary functions are disturbed as evidenced by frequent urination, which is apt to be painful, and the urine is large in amount. The urine may contain blood and even pus; excess of uric acid or oxalates are of common occurrence. From the history of the case can be learned the frequency of the attacks of pain, the nature of the pain and the part of the abdomen to which it is referred and whether it is fixed or migratory; whether or not it occurred after the ingestion of a heavy meal, after exposure to cold, or after unusual movement, or from position or indirect violence. The tenderness of a movable kidney is out of proportion to the degree of muscular rigidity and extends over a larger area than in a case of appendicitis. The above symptoms with the physical signs of a movable kidney make a plain case.

In the case of appendicitis the three cardinal symptoms are: pain at first general or referred to the ensiform cartilage or around the navel, later becoming localized to the region of the appendix; tenderness, most marked in the immediate neighborhood of the appendix; and rigidity of the lower portion of the right rectus muscle or the flat muscles of the abdomen overlying the appendix.

Floating kidney with twisted ureter may present symptoms very similar to an attack of post-cecal appendicitis. The pain, however, radiates in the line of the ureter, and is not increased by pressure to any marked degree. This condition, combined with a history of a movable tumor corresponding to the site of the kidney, the presence of blood in the urine, and changes in the amount of urine, and the absence of the cardinal symptoms of appendicitis will clear up the diagnosis.

Plastic Surgery.

The progress of modern surgery has been such as to enable us at present to do almost any kind of plastic surgery with so much certainty that the careful, expert modern surgeon may now accomplish so many things that he at times seems to possess almost a supernatural power. The rich nerve and blood supply to the face makes it the most successful field for the display of plastic surgery. There is scarcely any deformity about the face, neck, or nose, it matters not whether it is congenital or acquired, that may not now be corrected. The saddle-back nose is elevated with as much ease and certainty as a fractured limb is put into position; the most hideous hide-lip mouth is shaped up so as to make it "kissable," and to make it serve all the purposes that any other mouth serves. The "crow-feet" made upon our faces by time may be eradicated and nice smooth surfaces left in their stead. The miss with the exaggerated Roman, Hebrew, or turn-up nose may have it converted into any shape she desires, if she only has the money and will put up with a little privation for a short time. Moles, warts, and other blemishes about the face and neck are now disposed of with no trace left. Recently it has been determined that irregularities may be evened up by injecting sterilized vaseline beneath the skin, where it will remain indefinitely without giving trouble. Many small wounds of the face can now be closed without stitching, thus reducing the chances of producing a scar to a minimum. The field for plastic surgery in gynecology has a wide area, and the high state of perfection to which the art has been brought by the modern gynecologists goes to show that the workers in the field have not been idle. The reparation of a lacerated perineum or the closure of a vesico-vaginal fistula is accomplished with almost as much certainty as the closure of an incised wound on any other surface of the body.—The American Practitioner and News.

Deformities or Defects in Development from Adenoids.

John A. Thompson—Cincinnati Lancet Clinic, April, 1901.

We find in adults who have had adenoids

in childhood, narrow slit-like nostrils, with turbinate too small to preform their normal functions. The vertical dimensions of the of the nose are also lessened by the coexistent deformity of the mouth. A neglected case of adenoids in childhood will in adult life remain a mouth-breather.

The external nose presents appearances of deformity in the shape of a broad and flat root, with a pinched and narrow end

This condition presents a dome-like arch of the hard palate which increases in height where the condition of obstruction persists beyond the period of second dentition. An arrest in development of the upper lip causing a greater apparent projection of the upper front teeth.

Conjestive or Inflammatory Dysmenorrhoea

In a great many cases inflammation of the uterine mucous membrane is the cause of this form of dysmenorrhœa. The existence of disease in this part causes, perhaps little pain until the erythism, engendered by menstruation, occurs. Then great local excitement takes place, and dysmenorrhea shows itself. It may result from almost any pelvic inflammation, or from any influence which exaggerates and prolongs the congestion excited by ovulation. In this form the pain is generally at its height just before menstruation, and is much relieved, as a rule, when the flow appears. There is very often a slight degree of pain and discomfort between the periods.

Treatment.—It is curative and palliative; the former consists in the treatment of the various causes which produce congestion of the uterine, and in the latter opium and its alkaloids are the most effectual remedies for the relief of pain; but they should be avoided, as far as posaible, in all chronic condition. They are required, however, in several cases, especially when dysmenorrhoea is the sequel of pelvic peritonitis. Saline purgatives sometimes may avert an attack, or bromide of potassium, or the direct relief of the congestion by vaginal douches of hot water, warm baths, etc. A displaced uterus is often kept in a constant state of congestion, which can be relieved only by properly sustaining the organ. This is the most frequent of all the causes for congestive dysmenorrhœa, in some cases a slight degree of retroversion or anteversion will produce it, while in others direct descent will be found to be its cause. In many of these cases it will, upon recognition of the displacement, be scarcely credited by the practitioner that it is sufficient to be productive of the result. Yet replacement of the uterus will give such complete relief as to put all doubts at rest. If a fibrous tumour be the cause, a cure will depend upon its susceptibility of removal. Should any local inflammation be discovered as the cause of the evil, this, and not one of its many results, should be the subject of treatment.—*Indian Medical Record.*

For Bright's Disease with Œdema and Abundant Albuminuria.

The Gazette hebdomadaire de medicine et de chirurgie for August 1st cites the following from the Journal de medecine de Paris:

1. An exclusive regimen of boiled milk. Keep the limbs enveloped in cotton batting, covered with waxed tissue.

2. For four consecutive days, give five of the following pills:

℞ Powdered squill, Powdered scammony, Powdered digitalis, } of each ¾ of a grain.
Podophyllin ½ of a grain.
M. For one pill.

3. Administer daily four tablesponfuls, in milk, of the following mixture:

℞ Strontium lactate 600 grains;
Water 4,500 minims.
M.—*New York Medical Journal.*

Vegetarian Diet for the Masses.

Baelz gives the results of observations he has made on the Japanese, among whom the lower classes are almost entirely vegetarians. They are so, not from choice or principle, however, but from necessity, since whenever they are able they buy a little meat or fish and regard it as a great luxury. Their main article of diet is not rice, as usually supposed, because this is too expensive, and is used mainly by the well-to-do, but barley and buckwheat and the soya-bean, which contains twice as much albumin as the best beef, and costs one-quarter as much, while in addition it contains 20 per cent. of fat. The fallacy of Voit's dictum that 120 grammes of albumin daily are necessary for an adult is shown, for, as evidenced by the habits of the Japanese for generations, it is 20 to 30 per cent. too high, while it is demonstrated that a race may live on an almost exclusively vegetable diet and yet be capable of vigorous and protracted labor. The prevailing type of metabolism investigation, in which purely arithmetical results of analysis of the income and outgo are made, is unreliable and does not give a true idea of the values of diets, etc., for different conditions may produce almost identical results in figures. The disposition of the individual and, therefore, his capacity for work may vary widely, and therefore the author pro-

poses a new method of conducting such experiments, which shall include a study of this factor, and suggests the designation of "capacity balance" for its results.—*Medical Record.*

Nitrate of Silver in Tonsillitis.

Dr. E. B. Gleason ("Ther Gazette") says that when silver nitrate is applied to mucous membrane it is at first irritant, then sedative. The sedative effect is due to the fact that the inorganic salt is changed into sedative organic compounds. Whether the irritant or sedative effects of silver nitrate predominate, depends largely upon the character of the epithelial layer of the mucous membrane to which it is applied. If a sixty-grain solution be painted upon the posterior wall of the pharynx the irritating quality is manifested and produces discomfort, persisting for some time. If, however, this solution be painted upon inflamed tonsils and the inflamed lateral wall of the pharynx, the primary irritant qualities of the nitrates are scarcely perceptible, and the procedure is followed by a sense of great relief and comfort. Painting the lateral walls of the pharynx with a sixty-grain solution two or three times a day is one of the best methods of aborting acute pharyngitis and tonsillitis. The reddened parts are at once blanched, partly as the result of the astrigent effects of the silver and partly as the result of the formation of a closely adherent organic compound of the silver. The sedative effects of the application are so marked that the patient is usually able to at once swallow without much discomfort. The posterior wall of the pharynx should then be painted with a twenty-grain solution of potargol. This treatment, if repeated twice or thrice a day, for two or three days, will in a large proportion of cases abort phlegmonous tonsillitis.

Shot Wounds of the Philippine War,

Philadelphia Medical Journal (May 4) gives this synopsis of a paper in Annals of Surgery on "Gun-shot Wounds in the Filipino–American War," by Dr. E. E. Robinson: Out of 22,181 patients received at the First Reserve Hospital in Manila, from August 1, 1898, to May 1, 1900, only 7 per cent. had gun-shot wounds. There were 50 cases of intentional self-inflicted gun-shot wounds, a number of these being wounds of the forefinger. At one time there seemed to threaten an epidemic of these wounds. Of the total number of gun-shot injuries received 223 were brought in dead, or died within twenty-four hours, leaving the total number treated as 1373. The mortality of this latter number was 4.2 per cent. Robinson found the "explosive effect" to be rare, occurring in only 24 cases out of 462. When it did occur, it was usually in gun-shot wounds of the long bones or of the calvarium. In no instance was it noted in muscles alone, but in but two instances was it observed in wounds of solid organs. The old Remington bullet produces a wound which is nearly always infected, and the same is true of the "soft-nosed" or dum-dum Mauser bullet. The modern high-velocity projectile produces a wound which is seldom infected. This is due to its hardness and smoothness, which produces little bruising of the tissues, and to the fact that probably its high velocity produces sterility. Also the early application of antiseptic dressing on the field must be considered one of the greatest means of preventing infection from gun-shot injuries in modern warfare. Many of the gun-shot wounds of bone, even where comminution takes place, if produced by the modern bullet, will heal without suppuration or necrosis. In a number of cases where the bullet has not been extracted it has produced little trouble. It is thought advisable, however, always to remove the bullet of a Remington or a revolver. In 63 cases of high velocity gun-shot wounds of long bones there were but 12 infected, while out of 27 Remington wounds of the bones 23 were infected. Almost 50 per cent. of the low-velocity gun-shot wounds of the chest became infected, while only 12 per cent. of those due to the new modern projectile gave serious trouble. Primary hemorrhage from gun-shot wounds produced by the modern bullet was very uncommon. Three cases of aneurism are recorded as a result of gun-shot wounds. Gun-shot wounds of the knee-joint are usually aseptic, but if infected, Robinson thinks, demand immediate amputation to save life. As the direct result of gun-shot wounds there were only 12 major amputations performed, and only three of these were primary. A number of interesting cases are recorded of injuries to bones requiring resection; also several cases of interesting gunshot wounds of the face. Three cases are recorded of severe penetrating gun-shot wounds of the brain which recovered. Every case but one of gun-shot wounds of the spinal cord died of cerebro-spinal meningitis in from three to five days. Robinson is strongly of the opinion that gun-shot wounds of the abdomen, when produced with a modern high-velocity projectile, should not be operated upon. Of 30 cases treated without operation, 20 recovered. Of four cases operated upon, three died and only one recovered.

Death from hemorrhage usually followed gun-shot wounds of the spleen. Among these patients there were two factors which Robinson thinks militated against aseptic surgery; the greater tendency there to infection and the general poor health of the patient.

Drugs in Pulmonary Tuberculosis.

W. R. Huggard (Philadelphia Medical Journal).

By improving the general health; as for example, arsenic, quinin, strychnin, lime, phosphorus.

By increasing the local resistance of the affected tissues, as creosote, and its derivatives, salicyl preparations and counter irritants.

By modifying the quantity or character of the secretions, as the balsams, the terebinthinates, the essential oils, morphin and apomorphin, and inhalations, especially of formaldehyd.

By controlling symptoms that react prejudicially on the patient. Amongst these are: (*a*) Digestive ailments. (*b*) Excessive or needless cough, which shakes and exhausts the patient, causes fever, or prevents sleep. (*c*) Scanty expectoration and retention of secretions. (*d*) Fever, which spoils appetite, and prostrates the patient.

By removing complications, such as syphilis.

If digestion is bad, the only drugs indicated are such as will restore it to a normal condition. If digestion is good, the general condition satisfactory, and the patient improving, he refrains from using drugs unless some definite indication is present. Amongst the most important indications for drugs are persistent afternoon pyrexia in spite of absolute rest out of doors; a tendency to recurrent febrile attacks or to slight inflammatory attacks. This tendency is usually combined with impaired nutrition and with a low state of general health. In these conditions arsenic, strychnin, quinin, and salol are amongst the most useful tonics. Active softening, excessive cough, over-abundant expectoration, and, more rarely, scanty expectoration, expectoration of extremely purulent or nummular character, require attention; and the drugs useful for these conditions generally seem to have a favorable influence on the course of the disease in addition to the temporary relief from discomfort they may afford. Amongst such drugs are formaldehyd vapor, creosote and its derivatives, except the carbonate of guaiacol, which has generally seemed to be inert, terpin hydrate, oil of cinnamon, myrtol, the balsams, and the lime salts. In sluggish chronic softening, counter-irritation by iodin or by small flying blisters is of the greatest use. When an old syphilitic taint is present its removal should be our first care.

A New Fruit.

There is every reason to suppose that before long a most delicious fruit, new to America, will dominate our markets; already a few specimens have found their way to the seaboard cities. This is the mangosteen—native to the Moluccas and extensively cultivated in Ceylon and Java, and latterly introduced to Jamaica and other parts of British West Indies. It is about the size of a small orange, spherical in form, and when the rind is removed a juicy pulp, "white and soluble as snow," is revealed, possessing a most delicious flavor—something like a nectarine, with a dash of strawberry and pineapple combined. It promises, in a few years, to supersede the orange in popular favor, and attempts are already being made to introduce it into the Southern United States.—*Southern Clinic.*

Sulphur Cream.

George T. Jackson has had made by his druggist an elegant sulphur ointment which he uses extensively in the treatment of dandruff. Its formula is:

℞ White wax, ʒiiiss.
Oleum petrolati, ʒiiss.
Rose-water, ʒj.
Biborate of soda, gr. xv.
Sulphur, precipitated, ʒiiiss.

This is an elegant, smooth, white preparation without sulphur odor. It keeps perfectly, does not separate, and is as perfect as an ointment can be made.—Medical Standard.

Professional Zeal.

Why, it is often asked, has professional progress and discovery fallen so low in some countries, and why are both so active in others? If one glances at the bookshelves of a dozen or more representative physicians of one nation, or chats with their owners, he will find no desire for new or even for accuracy of old knowledge. New books are scorned. The one or two periodicals, if they take so many, are often not opened, and seldom read; their gathering of new discoveries is vague, and hearsay; they are satisfied to go on as their fathers did, tagging at the skirts of progress, and accepting just so much of it as will keep them from becoming ridiculous in the eyes of some more wide-awake colleag. The labor and pains required in the preliminaries of an exact diagnosis such as a

bright modern physician takes, are not dreamed of by these slouthful and last century relics. Were there last year a hundred thorough laboratory examinations made of the excretions of patients? Were there a dozen accurate and scientific refractions of eyes by all the physicians of some great nations? The physician who spends less than a hundred dollars annually for new books and periodicals cannot know of much less put into practice, the new knowledge steadily gained and poured fourth by the world's earnest workers. It is only this eagerness for knowledge, this zeal of self-forgetfulness, this heartiness of energy in forwarding progress, that places certain national profession in advance of others, and points to future leadershid. By whom is such zeal conspicuously illustrated today? By Germans and Americans.—*American Medicine.*

An Improved Method of Treating High-Seated Cancers of the Rectum.

Dr. Robert F. Weir. The author considers the Kraske operation as being very unsatisfactory, troublesome, and devoid of surgical neatness and precision. The Maunsell operation proposes to open the abdomen above the pubis, seperate the peritonæum from the bowel largely, and then to pass a loop of tape by a long mattress- needle from the opened pelvis through the rectem and out of the previously enlarged anus. By this tape the neoplasm is pulled down so that it appears at the anus everything the lower part of the rectum as it protrudes. The author's modification is as follows: After freely detaching the devided peritonæum so that the bowel and the entire contents of sacral curve are liberated behind nearly to the tip of the coccyx and in front to the edge of the prostate, a couple of iodoform tapes, about an inch apart, are tide around the bowel some three inches from the anus. The intestine being cut through, the lower end of the rectum is seized by foreceps and drawn out of the anus in an everted eondition. A long forceps carried through the everted bowel clasp the lower end of the upper bowel and draws it out into the world. Suture of the edges (with knots inside the bowell) is then done and the replacement is easy. It is best to provied drainage from the circumintestinal space below by a tube introduced from just in front of the coccyx. —*New YorkMedical Journal.*

The Tenacity of Scarlatinal Infection.

F. Lommel (*Munch Med. Woch.*, July 16th, 1901) considers that a characteristic of the infection of scarlatina is ats power of remaining active for a very long time. He quotes Murchison (among others) to show that a case of scarlet fever may occur a considerable time after a previous case has been removed. His own observations were made in Jena. In a home for deaf children, a boy was taken ill with scarlatina on Octobe 10th, 1900, and was removed to hospital on the same day. On November 27th he was discharged and returned to the home. Twenty-one days later another boy, who occupied the same room, was taken ill with scarlatina. He was at once removed to the isolation room, and was thence removed to hospital on the following day. The isolation room was disinfected with formalin a few days after. A little later on a 16-year old girl occupied this room as a bedroom, and mixed freely with the other inmates of the home. The room war thoroughly "cleaned" at Easter-time and on April 9th, 1901, the son of the director (9 years of age) used the room to sleep in until April 15th. He returned to his own romm then, and on April 20th was taken ill with scarlatina. There was no other case of scarlatina in Jena or its neighborhood. Lommel points out that in spite of the 133 day which had elapsed since the removal of the second patient, the room had remained infectious, and further remarks that the girl, who was herself insusceptible to the infection, did not carry it to any of the children. He excludes the possibility of the second case having brought back the infection, for in the case some of the other children in the house would have been infected.—*British Medical Journal*, Aug. 31, 1901.

The Treatment of Goitre.

At the last annual meeting of the German Surgical Society Professor Kocher presented the following statistics of his treatment of 1,000 goitres by operation. Of these according to the Medical Press 929 were cases of simple glandular enlargement, of these four died; twenty-seven were cases of malignant growth, of which six died; twenty cases were of an inflammatory character, of which but two died; twenty-four were cases of exophthalmic goitre, of which two died. These statistics are not alone valuable from their number, the care with which the cases were registered greatly enhances their value: thus we find that of cases of simple growth of the gland, in four cases the growth returned and he had to enucleate the gland. As a rule he found it sufficient in simple enlargements to excise such portion of the glands as were interfering with espiration. His most troublesome cases were those of prop-

tosis; the extirpation was both troublesome and dangerous. Such a brilliant record cannot fail to influence medical opinion. The older methods of blisters, setons, iodine painting, and so forth, were eminently unsatisfactory, and the thyroid extract treatment too often failed to produce the desired effects, and not unfrequently caused undesirable results.

The Folk Lore of Blood Amongst the Jews.

La France Medicale publishes an interesting article upon superstitions connected with blood, the most curious of which are found amongst the jews.

Jews naturally have a distaste for blood and their religion forbids its use. The blood of the sacrificial animals was carried away from the altar by an underground channel as something impure and at the time of the second Temple it was collected in the valley of Kedron, where the drain opened, and was sold to the gardeners for manure

The Jews therefore rarely employed blood either in medicine or magic and talmudic literature only affords the following examples of its use:

The blood of a grouse was used to anoint the eyes in cases of eye-diseases. For the cure of unilateral headache a grouse was taken and was struck with a piece of silver upon the side of the head in which the patient felt pain in such a manner as to draw blood, though care was to be taken that the blood did not run into the eye.

The bird was then nailed against the door in such a manner that the patient rubbed against it every time he entered and left the house.

Jaundice was cured by allowing the blood of a young ass to drip on a bald place made in the middle of the patient's scalp, but it was again necessary to be careful that the blood did not flow into the eye.

Bird's blood was known to be useful in removing stains in flax. Human blood is never mentioned except in the following passage of the treatise on The Sabbath: "Some say that the menstrual blood ought to be thrown to the cats, others that it should not be kept because it weakens." Raschi says in his commentary that "Whoever gives this kind of blood to a cat falls ill."

The Babylonian Jews, during the middle age, use to circumcise over a vessel of water in which the young people afterwards washed saying, "This is the blood of the everlasting covenant made between God and our father Abraham."

The case of the dying Pope Innocent VIII, whom a Jewish practitioner recommended to be transfused with the blood of little boys, owes the treatment less to the Jewish element in the doctor than to the ideas prevalent at the time he lived.

It is still held amongst the most ingnorant Jews that the blood of the patient is a good remedy to stop his bleeding. Blood from a circumcision or from the nose is boiled therefore into a hard mass and is then sprinkled as a powder over the wound or is used as a snuff for epistaxis. In the case of epistaxis, however, it is necessary to write on the nose or forehead with fluid blood, "*Sib b'tib j'min b'dam zeto*" to make the charm effective.

The blood of a fox or wolf applied externally is a cure for the stone. The blood of a ram is good against stomach-ache, and the blood of a goat against scrofula and gout. A wolf's blood is used for deafness and that of a pigeon for diseases of the eye. The dried blood of a cow, the fresh blood of a hare and the bile of a hare are good against piles.

In cases of severe or irregular loss of blood a woman should knead a little blood into the bread she makes, some of which should be eaten by a pig. Menstrual blood is also used as a cure for fever. The patient who is attacked is clothed in a garment stained with blood which has been dried before the fire at the end of a long pole.

To become invisible water melons should be dipped in menstrual blood and should afterwards be kept in a glass house. Anyone who carries this fruit when it is ripe will certainly be invisible.

Gout is cured by the menstrual blood of a primipara.

The whole question of primitive and existing beliefs in blood taboos is considered by Dr. Frazer in "The Golden Bough."

Value of Antitoxin in Diphtheria.

W. H. Griess (St. Louis Medical Record, Sept. 7, 1901) points out that we cannot expect the same immediate or ultimate results in every instance where antitoxin is given. There are the following varying conditions to deal with: The age of the patient, the duration of the disease, the general condition prior to infection, the parts affects, and the virulence of the infection. He concludes as follows:

Antitoxin should always be given as soon as the diagnosis is made with certainty.

Children require larger doses, as their natural resources for fighting diseases are always less than those of adults.

In mild cases of diptheria 2,000 units should be given as an initial dose, and if no improvement takes place within twelve hours it should be repeated.

All laryngeal cases in which prostration is severe, should have 4,000 units as an initial dose, and 2,000 units in 8 or 12 hours, if there is no improvement.

Intubation should be practiced before the child becomes exhaused. A stimulant should be administed beforehand, and before tracheotomy. The writer has seen more than one child saved by a hypodermic of ether injected when the child was apparently dead, after the trachea had been opened. This, together with artificial respiration soon caused the child to show signs of life.

General Plague Mortality.

When it is officially reported that 38,412 deaths occurred from plague in Bengal during 1900, the first thought is that the plague has indeed proved a scourge in the Lower Provinces; but when it further appears that the total number of deaths from all causes in Bengal in 1900 numbered 2,603,736, the comparative insignificance of the plague mortality becomes at once plain. In fact, outside Calcutta, the disease was epidemic in only a few districts of the Patna Division and Monghry. In those districts no doubt its effects are writ large: in Patra, for instance, where the birth-rate used to exceed the death-rate by 14 per mille, the death-rate now exceed birth-rate by 10 per mille. In Calcutta itself the deaths exceed the births by 38 per mille. But that even these figures are not due to plague ravages alone, is shown by the statistics of other districs where plague was unknown. The Lieutenant-Governor complains that the account given of the progress of the plague is "meagre in the extreme and throws absolutely no light on the origin of the disease, the causes which foster or retard its spread, or the success or failure of the measures adopted to check it." The Sanitary Commissioner states that a great deal of his time was taken up in organizing and supervising plague measures in the various districts and in Calcutta and the Lieutenant-Governor "regrets that he should have left no record of the valuable experience which he must have gained."—Indian Medical Lancet, July 29, 1901.

A peculiar recovery from what appeared to be a fatal obstruction of the bowel following operation is mentioned by Haemig (American Medicine). The patient was a man 59 years of age upon whom the removal of the right kidney had been performed on account of carcinoma that involved the vessels and the ureter. Everything went smoothly until the sixth day, when the patient, who in the meantime had had no evacuation of the bowels, complained of tympanites. The following day there was collapse, and the condition of the patient became so much worse that it was impossible to think of operation. All the signs of acute intestinal obstruction were present. As the outcome seemed necessarily fatal it was decided as a last resort to give him an injection of atropine, and 1-20 gr. was accordingly given! The physiological results were very pronounced. There was dilatation of the pupils, active delirium and small filiform pulse. The following day the patient was better, but it was necessary to give him a subcutaneous injection of normal salt solution. The pupils then became normal in size, the bladder was evacuated of 1,300 c.cm. by catheter, and there was some feculent vomiting. The same evening an injection of oil produced an abundant evacuation of the bowels, and the patient rapidly recovered. The cause of the obstruction could not be determined. It is not likely that peritonitis existed, and there were no signs of hernia. It is possible however, that thrombosis had occurred in the mesenteric artery. Sept. 1901.—*American Journal of Surgery and Gynecology.*

Indications for Cesarean Section.

Professor Treub, of Amsterdam (Aerztliche Rundschau), first refers to the fact that he had performed this operation five times within the previous three months. The indications were varied, and it would not be right for him to state that he was forced to perform this operation in each case.

The patient had an osteoma of the left ischium, which had already necessitated a prior Cesarean. Median longitudinal incision; delivery of living child and recovery of mother. Operation chosen by patient and performed at term after pains had set in.

Second patient, fourth pregnancy. Pendulous; abdomen transverse position of fetus Stenosis of vagina dating from previous dystocic labor and operation for relief of condition. Rupture of uterus feared. Successful Cesarean; mother and child both safe.

Both the foregoing were indications of necessity.

Third case. History of three stillbirths; patient already two days in labor; cervix as yet closed. Successful Cesarean operation. Child required reanimation; mother safe. Cause of dystocia found to be a rachitic pelvis. True conjugate 9¼ cm.

Fourth case. Generally contracted, rachitic pelvis. Conjugate 9½ cm. Child could not be expelled by the normal route. Cesarean operation safe for mother and child.

The fifth and last case was of the same

nature as the two preceding, and was likewise doubly successful. Treub makes some interesting comments. Leopold's law for the insertion of the placenta held good in all but one case.—*Obstetrics.*

Dysentery.

Lesage (St. Louis Medical Review, Sept. 7, 1901).

There exists in the blood of dysenterics (dysentery of China, Algeria, etc.), a micro-organism which increases in number with the gravity of the attack and diminishes with convalescence.

This parasite is polymorphic; sometimes a micrococcus or streplococcus, it usually presents itself as a diplococcus of unequal portions. In the latter case, one of the elements being smaller, it resembles a balloon, supporting a basket. The diplococcus is motile, it is surrounded by a white areola, which forms its capsule. The latter may contain several elements which retain their indidual motility.

Slightly colorable, the microbe is decolorized by the gram stain.

In liquid media it takes the above forms. On solid media the culture is difficult to see, and has a fine granular aspect.

It exists in notable quantity in the intestinal products.

At autopsy the microbe is observed in all the organs. It is in pure culture in the mesenteric veins and glands, and exists in abundance in the ulcerations of the mucosa.

In subcutaneous injection, with rabbits and guinea pigs it causes septicemia without intestinal localization. In the cat the same result is obtained, but there is also noted some hyperemia of the mucosa in the large intestine, and it is then also found in pure culture in the mesentric veins and modes.

Syphilitic Basal Meningitis.

E. Hoffman (Berl. klin, Woch.) describes a case of precocious syphilitic basal meningitis, which he considers of interest. The patient was 26 years of age. His past history showed that he had never been really ill before. On July 5th, 1900, eight days after coitus, he noticed two discharging sores on the penis. These were healed by a "barber," but appeared again about the end of July. About the middle of August he applied for treatment in hospital, and a Hunterian chancre was seen on the under surface of the prepuce. On the 27th a slight roseola developed. He was treated with subcutaneous injections of hyd. perch. (doses, gr. 1-6). His symptoms disappeared with this treatment. On November 13th severe pains developed in the temple on the side and in the occipital region. Two days later he vomited and was seized with short attacks of giddiness. On December 9th double vision was complained of. His visual acuteness was deteriorated. A well-marked Bell's palsy was present; and the abducens nerve was also paralysed. The taste sense was less acute on the left front portion of the tongue. There was well-marked optic neuritis. The tongue was protruded to the right. The diagnosis was made by summing up the lesions. These were complete right racial paralysis, right abducens paresis, weakness of the right hypoglossal nerve, and disturbance of sense of taste on the right side of the tongue, combined with severe headache and double optic neuritis. There could be no intracerebal lesions, as the symptoms were too localized. A gummatous affection of the bones was negatived by the short duration. Hoffmann, therefore, considered it to be a case of circumscribed basal meningitis of a syphilitic origin. The condition cleared up under anti-syphilitic remedies (mercury and iodide of potassium), leaving only a slight paresis of the facial muscles, and a minimal paresis of the abducens. He points out that the case is extremely rare, inasmuch as the meningitis developed 4½ months after the primary affection, and 2½ months after the secondary (rash manifestations; which the localized character of the inflammation, and the development of the lesion, in spite of early energetic treatment make it of considerable interest.—*British Medical Journal*

The permanganate of potassium has, for some time past, been suggested as an immediate antidote to the influence of morphine and other organic poisons- A foreign writer recently suggests the permanganate of sodium as fully as effective as the potassium salt, and devoid of any poisonous properties in anything but enormous doses.

The repeated use of chloroform as an anæsthetic in any one case is thought to exercise so depressing an effeet on the heart that dilatation to a greater or less degree is almost sure to follow if the agent is persisted in. If this be true, the influence of a single administration of chloroform upon the heart will remain after the remedy is withdrawn and heart tonics are undoubtedly indicated.

Rastus—Wha yo' tink is de mattah wif me, doctah? Doctor—Oh, nothing but the chicken-pox, I guess, Rastus (getting nervous)—I clare on mah honah, Doctor, I in'at been nowhar I could ketch dat!

Acetic Acid as an Antidote to Carbolic Acid.

Some time ago when I was washing a wound with carbolic lotion (1 in 40) I had often and often to place my hands in the basin. After a few minutes I felt a peculiar sensation in the whole of my right arm (from fingers up to shoulder joint). I searched for the cause and found a little scratch by the side of a finger rail. Then I thought that acid acetic would do some good, so I applied a piece of lint soaked in acid acetic dil. (B. P.) and dipped the finger in the solution. In nearly 20 minutes there was no trouble of any kind. Afterwards I painted 4 layers of strong carbolic acid on the back of my hand and applied a piece of cotton wool soaked in acid acetic dil to see the result. In 3 minutes the burning pain disappeared, while in 45 minutes the white mark also disappeared, leaving only a little redness behind.

Then I painted only one layer of the acid on the forearm and proceeded to remove it by the same means.

In 15 minutes there was no mark remaining. It strikes me, therefore, that it might be of use internally also when taken by mistake, and I beg my brethren to try it internally when they have a chance to do so.—*Dhurni Dhur in The Indian Lancet.*

Arsenic in Diabetes.

Wm. Murray, M. D., F. R. C. P., ("Rough Notes on Treatment") says: In the standard works not much stress is laid on the value of arsenic. The writer first puts the patient on the usual diet, and gives codeia. The next step is to bring him well under the influence of arsenic, and keep up the treatment for three months, during which he gradually returns to a more or less starchy or saccharine diet. The best preparation is liq. arsenici hydrochlor. It is better tolerated than Fowler's solution, and need not be given with meals: ♏x t.d. is a proper dose.

In 1891, a man of good physique and active habits failed in health, lost flesh, and complained of thirst and dry mouth. In August the s.g. of the urine was 1042, it contained much sugar, and the daily quantity was 60 to 70 ounces. He was a complete wreck. The diabetic diet and codeia materially lessened the quantity of urine, and reduced its s.g. to 1028. As no marked improvement in the general condition took place, and the sugar did not disappear, liq. arsen. hydrochlor. was tried, and at the end of six weeks the sugar had entirely disappeared, the s.g. was 1025, and the quantity of urine was 50 ounces per day. In 1892 he gradually returned to ordinary diet without the reappearance of sugar. In 1896 he was robust and free from disease.

Advantage ought to be taken of the improvement which usually follows dieting and codeia by then pushing the arsenic. Patients seem at that time peculiarly susceptible to the remedy. Codeia and diet seem to stop short at a considerable reduction of sugar and relief of the urgent symptoms, while arsenic completes the cure.

Since the writer published these remarks in the Lancet, they have been confirmed by Sir Dyce Duckworth and others. Dr. Taylor, of Scarborough, wrote that he had "the most extraordinary successful results" with arsenic in diabetes. "In pure diabetes, and in the functional glycosuria, with pruritus of obese middle age, it is a charm." But in certain cases arsenic completely fails. The reason for the difference in results cannot be stated. Gouty and plethoric patients are unfavorable subjects. Where there is a hereditary tendency to the disease, as often exists in young patients, the remedy frequently fails. On the other hand, in a large proportion of successful cases, the disease seems to be due to overwork or worry, and especially to both. Thus in the case of a medical man, whose large practice broke him down, dietetic and other treatment failed; but after taking arsenic for a few months he lost all trace of glycosuria, and recovered.—*Indian Medical Record, Aug. 14, 1901.*

Vaginal Examinations.

Dr. L. G. Baldwin gives some useful hints concerning the method of making vaginal examinations. He objects to having the legs flexed too far, as this interferes with the abdominal hand. The feet should rest on the table. The fingers of the left hand are more frequently used in the vaginal examination. As to the number of fingers used, he prefers one, and believes that he can with two, although sometimes it is possible to reach farther with the second finger. As to the position of the hand. In all the text-books that he has been able to consult, the pictures of the examing hand are shown with the examining finger or fingers extended, the thumb extended and held vertically, striking the clitoris and urethra, the remaining fingers half flexed toward the palm of the hand, or bent down against the perineum and over the anus. He can make no progress in examining by that method, because the examination is limited by the symphysis and coccyx. He believes the proper method is to fold the fingers on the hand and get the thumb well out of the way, then the perineum can be pressed back and so gain a considerable dis-

tance. With a little practice the radial side of the finger can feel just as well as the palmar side, and one or the other surface may be made to touch all parts to be examined by twisting the hand from side to side, the perineum being well pressed back. One great advantage in making vaginal examinations which he has noticed is not often made use of is that, after the perineum is pressed back, instead of forcing the finger in, the wrist is bent so that the finger may be pushed up behind the uterus. The uterus can best be palpated making gradual pressure with the abdominal hand.—*Brooklyn Med. Jour.*

Tri-State Medical Society of Alabama, Georgia and Tennessee.

The Thirteenth Annual Meeting will be held at the Tulane, Nashville, Tuesday, Wednesday, and Thursday, Oct. 8, 9 and 10, 1901. The railroads will give reduced rates on the certificate plan.

The following papers have already been promised:

PARTIAL LIST OF PAPERS:

President's Address—M. C. McGannon, Nashville, Tenn.

Some Points in the Diagnosis and Treatment of Heart Diseases—J. B. Marvin, Louisville, Ky.

Thuberculosis—Y. L. Abernathy, Hill City, Tenn.

Night Sweats of Phthisis—L. P. Barbout, Boulder, Colo.

Malaria as a Cause of Puerperal Eclampsia—E. O. Williamson, Gurley, Ala.

Static Electricity—J. B. Goodwin, Kingston, Tenn.

Smallpox—Wm. A. Duncan, Chattanooga, Tenn.

Remarks on Some Recent Cases—A. B. Ramsey, McMinnville, Tenn.

Anesthesia in General Practice—J. B., Murfreesboro, Tenn.

Anesthesia—German Haymore, Chattanooga, Tenn.

Local Anesthesia—Cooper Holtzclaw, Chattanooga, Tenn.

Local Anesthetics as Applied to Mucus Membranes—B. F. Travis, Chattanooga, Tenn.

Studies of the Blood and Urine in Connection with Anesthesia—H. Berlin, Chattanooga, Tenn.

Autoinfection—A. M. Boyd, Chattanooga, Tenn.

Migrains—Curran Pope, Louisville, Ky.

Report of Committee on Sociology—R. R. Kime, Atlanta, Ga.

a. Heredity and Acquired Characteristics as a Social Question—R. R. Kime, Atlanta, Ga.

b. Legislation and its Limitation in Prevention of Crime and Disease—Hon. John Bell Keeble, Nashville, Tenn.

c. Marriage and Heredity in Relation to Crime and Insanity—T. O. Powell, Millageville, Ga.

d. Tuberculosis: Its Prevalence and Prevention—J. D. Cromer, Atlanta, Ga.

e. Suppression of Consumption—R. C. Bankston, Birmingham, Ala.

f. Syphilis and Its Prevention as a Social Question—Childs and Campion, Atlanta, Ga.

Syphilis and Its Relation to Eye Disease—A. W. Sterling, Atlanta, Ga.

The Prevalence of Gonorrhoea in the Male as Social Question—W. Frank Glenn, Nashville, Tenn.

Gonorrhœa in the Female with Sugestions as to the Means of Prevention—W. G. Bogart, Chattanooga, Tenn.

The Development and Control of the Sexual Instinct—J. W. MacQuillan, Chattanooga, Tenn.

Softening of the Brain—Michael Campbell, Knoxville, Tenn.

Diagnosis and Treatment of Typhoid Fever—J. C. LeGrand, Birmingham, Ala.

A Plea for the Better Teaching of Physical Diagnosis in Southern Medical Colleges—Hazelle Padgett, Columbia, Tenn.

Acute Dysentery: Some Experiences and Report of Cases—Allen E. Cox, Milan, Tenn.

Limitation in Abdominal Surgery—J. J. Crofford, Memphis, Tenn.

Conservative Treatment in Appendicitis—W. E. Fitch, Savannah, Ga.

Trachoma of the Female Genital Tract: A Plea for Its Early Recognition—J. A. Hale, Alto Pass, Ill.

Flat Foot—Michael Hoke, Atlanta, Ga.

Anatony of the Genital Organs with Specimen—J. S. B. Woolford, Chattanooga, Tenn.

Gonorrhœa—J. W. Johnson, Chattanooga, Tenn.

Diseases of the Signoid Flexure—W. L. Nolen, Chattanooga, Tenn.

Infant Feeding—C. S. Durand, Chattanooga, Tenn.

Scarletina and Its Complications—H. B. Wilson, St. Elmo, Tenn.

Brain Surgery: Report of Cases—Edwin B. Anderson, Chattanooga, Tenn.

Rheumatism: Cause or Effect in Affection of the Throat—W. Cheatham, Louisville, Ky.

The Work of the Laryngologist in Its Relationship to that of the General Prac-

titioner—Richmond McKinney, Memphis, Tenn.

Superficial Foreign Bodies in the Eye—A. C. Corr, East St. Louis, Ill.

The Future of the Negro from the Standpoint of the Southern Physician—Seale Harris, Union Springs, Ala.

Titles to be Announced—W. D. Gaines, Lafayette, Ala.

Titles to be Announced—W. R. Blue, Louisville, Ky.

Titles to be Announced—Joseph Price, Philadelphia, Pa.

The Sanitation of Havana—Charles M. Blackford, Washington, D. C.

Lunacy and Crime.

While admitting that hot weather makes for irritability, one cannot regard the numerous murders and crimes of violence which have lately been recorded as mere incidents of the dog days. There is, says the "Hospital," a deeper cause at work. In many cases it may be suspected, and in some it is admitted, that insanity is at the root of the mischief, and the question becomes one of very considerable urgency whether some of them are not the direct result of the present condition of the law which renders it so difficult for those who are suffering from incipient mental disorder to obtain proper treatment. On every side we see hospitals for the reception and treatment of every malady under the sun—except diseases of the mind. On every side we find a general agreement, not only among medical men, but among all men, that it is best to take a stitch in time, and that if one would be cured one should seek treatment at the earliest possible stage of one's malady. It is common sense, it is common practice, it is the way adopted in regard to all diseases, except those of the mind. In regard to these the law steps in, and on the plea of protecting the lunatic and of preventing false imprisonment, renders treatment impossible until the mischief is done. We will undertake to say that if a patient were to walk into any hospital in London and say that he felt a strong desire to murder someone, and that he wished to be controlled, there is not one that would take him in, or indeed that would dare to put him under control, unless other "facts indicating insanity" were manifest, so that he could be "certified." Like the dog, which, according to the popular view, must prove that he is ferocious by biting someone before his master can be punished for not keeping him under control, so with the commencing lunatic. He must take his bite, he must commit some outrageous crime, and then he must take the consequence. If the obsession under which the crime was committed was an isolated symptom he will probably be hung, but if other "facts indicating insanity" are discovered he will be kept in comfort for the rest of his life, or, as the saying is, "during his Majesty's pleasure."

Acute Nephritis in Children.

The treatment consists of rest in bed between blankets, milk diet, water drunk freely, and, at the start, a calomel purge followed by a mild saline, such as liquid citrate of magnesia. The body may be sponged with warm water, or a warm bath given once or twice a day, precaution being taken to avoid chill. A non-irritating diuretic is the citrate or bitartrate of potassium, which may be given in water with lemon juice and sugar. The severe cases with dropsy, fever and suppression of urine must be treated actively by dry cups on the lumbar region, by purgation with an active saline (magnesium sulphate), and by free sweating by a hot-air bath or hot pack. A daily irrigation of the colon with normal salt is of value. If uremic symptoms set in, bleeding is the most certain means of relief, two to six ounces of blood being drawn from a child of five years. A full and bounding pulse requires nitroglycerin; threatened convulsions demand bromides and chloral by enema. The patient should be confined to bed as long as there is a trace of albumin in the urine, unless chronic nephritis is seen to have developed. The post-nephritic anemia calls for iron, preferably Basham's mixture.—*Medical News.*

A Colorado Official Offers to Test Dr. Koch's Theories.

In view of the interest taken in the question of whether animal tuberculosis can be communicated to human beings, T. L. Monson, State Dairy Commissioner of Colorado, has offered himself as a subject for a thorough test of the matter, provided a suitable annuity for his family shall be assured in case of fatal results.

The Spitting Nuisance in Germany.

At the recent meeting of the German Society for Popular Hygiene the practice of spitting in public places was vigorously inveighed against and the unsanitary feature of the wearing of long trains by women was also made the subject of vigorous denunciation. Resolutions were finally adopted petitioning the government to prohibit spitting in public conveyances and urging women to do away with dress trains for street wear.—*N. Y. Med. Jour.*

Convulsions in Children.

Results in the study of convulsions in children may be summed up as follows: (1) 1 per cent. of the children applying for treatment at the Children's Hospital, London, came for convulsions; (2) 10 per cent. of children between five and twelve years of age gave a history of convulsions; (3) cases that appear to be due to some manifest reflex cause may turn out to be true epilepsy; (4) other cases, where the attacks occur frequently and without apparent cause, may suddenly recover—at least for a considerable period; (5) children who have had convulsions may be strong and free from nervous tendencies in later life, although the proportion who have nervous tendencies seems to be greater than in those who have not had convulsions.

The Lay Press as an Educational Factor in Things Pertaining to the Public Health.

Since Dr. Koch's address before the British Congress the daily papers have been teeming with various and sundry reports in reference to it. The statement that tuberculosis is not transmissible through the agency of heredity—a fact fairly well established among the profession for several years—has been voiced from the editorial house-tops as a discovery announced for the first time in medicine. Naturally, the text of Dr. Koch's address has been garbled, but a great deal that is true has reached the public ear, and much good will accrue from its publication.

That the laity are woefully ignorant of things medical there can be no doubt. That this ignorance has been much enhanced by the publication of ridiculously perverted reports of things pertaining to medicine in the daily newspapers there can be equally no doubt. As an educational agent the newspaper is a potent factor for good or bad. Had the lay press announced years ago that tuberculosis was contagious, and that the sputum of tuberculosis patients was the active agent in disseminating the disease, its eradication would have become much simplified and advanced with the education of the masses.

Not far in the rear of the dread "white curse" there stalks another enemy to the public health—syphilis. The laity account is a purely venereal disease, and it speaks of it only behind closed doors. The press adds to this impression by whispering it to its readers as "blood poison" or "a loathsome disease," covertly hinting at its venereal origin. Yet how frequently does the physician meet with the extra-genital form of chancre! And in the vast majority of such instances, on account of the viewpoint on the laity on syphilis, all but the patient himself remain ignorant of the character of the sore, a course of action that exposed countless numbers of innocent persons to the contagion.

The progress of medical and sanitary science has been impeded for ages by the ignorance of those outside of the profession. The lay press has afforded but little aid to scientific advancement, when it is in a position to do much. We feel that this lack of assistance is due in a great measure to a pardonable dearth of knowledge on matters contained in the province of medical science on the part of those engaged in editing the daily newspaper, and we would respectfully offer the suggestion that each paper retain on its staff a competent medical editor of censor, whose duty it will be to give the people the truth on matters pertaining to the public health.—The American Practitioner and News.

Diagnosis and Treatment of Tuberculosis of Bones and Joints.

Dr. De F. Willard (International Medical Magazine) says that it is necessary to emphasize that Rheumatism in a single joint in a child never exists without positive indications of fever. Of the symptoms of tubercular invasion of a joint, muscular rigidity is the most reliable sign, and usually one of the earliest symptoms. A careful examination is necessary in all cases.

Children of tubercular parents are predisposed to tubercular diseases, but an absolutely healthy child may, under the influence of a traumatism, have a joint tuberculosis. There can be but one rational line of treament:

To fortify the entire resistive powers of the individual so that the assault of the bacilli may be successfully repulsed, limited, and ultimately cast out as debris or successfully encapsulated.

To assist these powers by rest and mechanical measures, having for their view the prevention of added inflammatory action, which may give mixed infection and lead to suppuration.

The removal of the diseased focus or of its products, as necessity arises.

For diarrhœa of children, accompanied with slight inflammation, straining, and the passage of jelly-looking matter, but no true dysentery, five drops of castor oil, given every hour in water with sugar and gum, is an excellent remedy.

On the Treatment of Foul Wounds

Dr. Arbuthnot Lane describes some of the methods he is in the habit of using in the treatment of foul wounds, more especially in the case of compound fractures of the bones of the extremities. Dr. Lane's views on the question of the treatment of fractures are well known to the profession, and though the majority of practitioners are not able to accept all his teaching, yet there is always food for reflection, and many useful hints are to be obtained when a surgeon of so much experience and originality describes the results of his work in any particular direction. Commenting upon a paper of Dr. Bennett's, in which that surgeon, having collected the opinions of more than one hundred British surgeons on the question of operative *versus* non-operative treatment of fractured pate'la, concluded that, at all events for the present, the latter method should be adopted by the medical profession as a whole, Dr. Lane says: "This seems to me to be a terrible conclusion to arrive at, since it is nothing more or less than a charge of surgical inadequacy or insufficiency, whichever you like to call it." He thinks that if surgeons are not sufficiently cleanly to wire such a simple bone as a fractured patella, they certainly cannot undertake the management of an operation for a spiral fracture of the long bones, for instance. It is a side issue, perhaps, from the general purpose of the paper, but it will serve to illustrate the fact that Dr. Lane cannot be followed in all his arguments, for it will not be generally admitted that an operation involving the knee-joint, a joint notoriously difficult to deal with aseptically, especially when in an abnormal condition, as after fractured patella, is on the same plane as an operation upon the diaphysis of a long bone, where no synovial membrane is involved. Returning to the consideration of compound fractures, especially where there is an extensive skin wound, and the muscles and other soft parts are much lacerated, as in fractures from direct violence, Dr. Lane advises thorough cleansing of the wound and skin, then free incision over the site of the fracture and careful removal of all dirt, foreign bodies, fragments of bone, etc. After thorough washing with some germicide lotion, the parts are carefully dried and every cranny and crevice of the wound is thoroughly packed with cyanide gauze, wrung out of 1 in 20 carbolic acid lotion. This is removed at the end of twenty-four to thirty-six hours, when the wound will be found to be perfectly dry. The bones can now be screwed or wired together and ordinary dressings applied.

In the case of very foul wounds the use of precipitated sulphur is strongly urged. It is mixed as a paste with glycerine, and a piece of sterile gauze is thoroughly permeated with it. This gauze is packed into the wound, which has been thoroughly dried. Over this a large hot boric acid compress is placed and it is changed every two or three hours. When the sulphur has produced a sufficient slough, the gauze is removed and the wound packed with cyanide gauze in the way previously described. —*Clinical Journal, July 17, 1901.*

Prepared by the Rio Chemical Co., St. Louis, S. H. Kennedy's extract of pinus canadensis is obtained from the hemlock spruce, an indigenous tree of considerable height, and having a coarse, heavy bark; the bark, moreover, is highly astringent, containing, as it does, both tannic and gallic acid, besides an oleo-rosin juice which is constantly oozing from it. To use an expression freely emyloyed by those who have given Pinus Canadensis a trial, "it acts like a charm on mucous surfaces." It therefore posses properties which give it a prominent rank in the treatment of an important class of maladies. Imparting tone and vigor to exhausted and relaxed mucous membranes, it exercises a most powerful influence over the various catarrhal affections; hence in nasal catarrh elone, its value as a therapeutic agent cannot well be overrated. Its almost phenomenal success in gonorrhea, viginitis, and all granular and inflammatory conditions of the male and female genitals, gives it a priceless value to the specialist.

For Intestinal Tuberculosis in Infants.

The *Gazette hebdomadaire et de chirurgie*, for July 11th, cites the following from *Nonveaux Remedes:*

℞ Silver nitrate, 15-100ths of a grain;
Powdered starch, } of each, 30-
Powdered marshmallow, } 100 of a gr.

M. For one pilule. One pilule to be taken daily for three consecutive days after the administration of a light saline aperient. If the diarrhœa does not cease, the dose should be raised to two, or even three, pilules daily during two consecutive days.

This treatment is suitable for children from five to ten years of age. For young infants the following draught is recommended:

℞ Silver nitrate, 15-100ths of a grain;
Raspberry syrup, } of each 750 minims.
Distilled water, }

M. From a few coffeespoonfuls to the entire draught, according to age.—*N. Y. Medical Journal.*

Ovariotomy for Inoperable Mammary Cancer.

During the last few years George T. Beatson, surgeon of the Glasgow Cancer Hospital, has made a number of very interesting observations concerning the nature of cancer and as a result has suggested a method of treatment for inoperable mammary cancer in women which, in selected cases, seems to have something to recommend it. Beatson calls attention to the fact that the human body represents groups of highly differentiated epithelium, which originally started as as ingle cell, the ovum, each unique in its action and each incapable of generating any new bodies. In the ovary and testicle there remains in each organism a unique germinal epithelium, capable of undergoing elaboration into other compound beings, and therefore different from any other cell in the body. He believes that the so-called special cancer cells will be found to be vacuolated germinal cells corresponding with those fouud in the ovary alone. Special cancer growth, according to this theory, would seem to be due to epithelium taking on characteristics of germinal epithelium. Beatson became interested in the custom prevalent among Australian farmers of spaying cows during lactation in order to prolong indefinitely the period of lactation. He explains this by noting that in normal lactation the epithelium lining the acini and galactophorous ducts undergo rapid and enormous proliferation. This hypertrophy results in swelling of the heaped up cells, which undergo fatty degeneration, burst their cell envelops and pour their finely divided fat particles in the form of milk into the ducts. Here we see an enormous reproductive cell activity, with rapid destructive cell metamorphosis. The cells involved in this process are of the identical epithelium which undergoes hypertrophy in cancer of the breast, the difference being that in cancer, continued growth of the epithelium takes place, instead of its breaking down. From these observations he argues that if spaying a cow during lactation causes the cell degeneration to persist, the same operation upon a woman suffering from mammary cancer might also produce a retrograde metomorphosis of the cancer cells. In several operations upon cases of inoperable mammary cancer he actually witnessed the disappearance of the tumor.

In the New York Medical Journal of August 3rd, 1901, Dr. Bobert Abbe, after discussing Beatson's theories reports two most remarkable cases in which ovariotomy was followed by the rapid disappearance of recurrent cancer of the breast. Abbe also mentions five other cases in which the results while interesting are not so remarkable as the first two.

Recurrent mammary cancer, which has been pronounced as absolutely inoperable, is such a hopeless condition that anything which gives even a faint promise of cure will usually be readily accepted by the patient and friends, and as such cases are not far to seek it is likely that we shall soon have further reports of operations like the above, which in view of the fact that the only alternative at present is a lingering and painful death, seem to us justifiable.—*St. Paul Medical Journal*, September, 1901.

Treatment of Primary Vaginal Cancer.

Kroenig (*Arch. f. Nyak.*, vol. lxiii, 1901, Parts 1 and 2) reminds us that this rare disease is often inoperable from the first, that is, in cases where it infiltrates the whole vagina, converting it into a rigid canal. There is a localized variety, however, which in two-thirds of all reported cases arises in the posterior wall. Simple incision is quite useless. Extirpation of the entire vagina with the uterus has proved on the whole unsatisfactory; recurrence nearly always occurs. Out of two cases operated on by Kroenig, one patient died ten weeks after the operation from return of the disease; the second was living free from recurrence five years after the operation. The rectum is rapidly involved, and the tissues of the posterior part of the bladder soon became infected. The bladder, especially its portion in close relation to the vagina, cannot be safely excised. But, as general surgeons have shown us, the rectum can be freely excised with relative ease and safety. Kroenig considers that parasacral incisions are not needed; the rectum can easily be reached from the vagina. The vagina and uterus may be extirpated first, the rectum set free and its upper part drawn down, then a portion is excised and the contents united (Zweifel). Friedrich's plan is more suitable in some cases. The posterior wall of the vagina is resected, and the corresponding part of the rectum set free by lateral incisions which are prolonged till the entire calibre is liberated. Douglas's pouch is opened, and the uterus and part of the anterior vaginal wall removed, then the portion of the rectum which was adjacent to the vagina is resected. Care must be taken not to disseminate the disease, the incisions being made from the cancerous deposit.—*British Medical Journal, Aug. 31, 1901.*

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Chinese Proverbs About Women.

Respect always a silent woman; great is the wisdom of the woman that holdeth her tongue.

A vain woman is to be feared, for she will sacrafice all for her pride.

A haughty woman stumbles, for she cannot see what may be in her way.

Trust not the woman that thinketh more of herself than another; mercy will not dwell in her heart.

The gods honour her who thinketh long before opening her lips.

A woman that is not loved is a kite from which the string has been taken; she driveth with the wind, and cometh to a long fall.

A woman that respects herself is more beautiful than a single star; more beautiful than many stars at night.

Woman is the ease for that which pains the father; she is balm for his troubles.

A woman who mistakes her place can never return to where she first was; the path has been covered up from her eyes.

A woman desirous of being seen by men is not trustworthy; fear her glances.

Give heed to her to whom children have come; she walks in the sacred ways, and lacks not love.

A mother not spoken well of by her children is an enemy of the State; she should not live within the kingdom's wall.

A woman without children has not yet the most precious of her jewels.

Give heed to the voice of an old waman; sorrow has given her wisdom.

A beautiful woman knows not her charms, therefore is she beautiful, more so than the colours of the sea.

Like sheep that the leaderless are many women come together for much talk.

The happiest mother of daughters is she who has only sons.

The minds of women are of quick silver, and their hearts of wax.

Apomorphine is equal to cocaine as a local anesthetic for the eye, 6 to 12 drops of a 2 per cent. solution is required. It is valuable in breaking up the tobacco habit.

To demonstrate solubility, drop one in water; it will disintegrate in thirty seconds.

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Hints on Typhoid Fever.

Dr. M. G. Price: "In hemorrhage use ergotin and digitalin. For insomnia and nocturnal delirium give morphine or codeine. For fighting delirium of the first stage give veratrine and tarter emetic. For 'low muttering delirium' and weak heart give atropine. Kill the micro-organisms and render the stomach and intestines aseptic by giving zinc sulpho-carbolate until the stools lose their odor—up to 100 grains daily. Calomel is useful in the first stage. If sweating is profuse, use hydrastin. For subsultus tendinum give strychnine. Eor pneumonic symptoms use sanguinarin. Leptandrin is useful in constipation. Bismuth subnitrate is useful in gastric irritation.—*Wis. Med. Record.*

Pro Bono Publico.

Professor Osler got off a good thing the other day at the British Congress on Tuberculosis. During the opening exercises much was said of a nature flattering to the profession. Dr. Osler remarked that a large delegation had come over from the United State, but that it had not come like some of the "trusts" of which we have heard so much of late, and yet they represented a magnificant "trust." But while the motto of the ordinary trust was "damn the public," there motto was *pro bono publico.* —*Journal American Medical Association.*

A Bacillus Isolated from the Blood of Syphilitics.

De Lille and Jullien (*Academie de Med.*, Paris, July 2nd, 1901,) report the successful isolation of a characteristic bacillus from the blood of syphilitics. The blood in each case was taken from a vein of the arm; in this blood are to be seen the spherical refractile bodies which have been described by other writers, but the nature of which has not been elucidated. The authors believe that the negative results of culture experiments hitherto have been due to the presence in the coagulated blood of a bactericidal alexin. They have used for culture blood plasma separated from the serum, and also fluid from blisters which they state is alexin-free. From these on the ordinary media they almost always obtained a culture; in cases primarily negative they were successful by using the method of culture in a collodion sac. The bacillus is polymorphic, either short or thread-like. The appearances on culture media are described. The bacillus is pathogenic to guinea-pigs, and produces locally an indurated ulcer with swelling of the nearest lymph glands; the organism was in no case found in the cadaver. The blood of syphilitic patients added to a three days' old culture of the bacillus causes agglutination of the latter; normal serum produces no such effect. Inoculation of the bacillus on animals already infected with syphilis was without effect. From a rabbit inoculated from a culture a large quantity of blood was obtained on the third day; on separating this into plasma and serum cultures were obtained from the plasma, not from the serum, an observation which supports the theory of an alexin in the serum. This alexin, the authors state, is "fixed" by the isolated bacillus when the latter is injected into animals already infected with syphilitic products.—*British Medical Journal.*

Home Treatment of Phthisis.

Guy Hinsdale considers home treatment to be usually a make-shift, adopted from necessity and rarely from choice. Persons who leave their homes for hospitals, sanatoriums, and even open resorts, will do more for themselves than they would at home, and conform more readily to the regime prescribed. City air is impure, full of dust, smoke, carbonic-acid gas, and pathogenic organisms; moreover, at home, in the winter, the transitions regarding relative humidity vary too greatly between indoors and outdoors. Under the open-air treatment, the patient has few, if any, of these transitions. In Colorado and New Mexico he has dry air all the time. The place where a person has contracted phthisis is usually not a good place for him to remain for treatment.—*Pennsylvania Medical Journal.*

When the Forceps Should be Used.

Dr. Dervall of Atlanta in the Electric Medical Journal gives the followinfi very practical suggestions:

1. Signs of breaking down on the part of the mother, evidenced by a quick, weak pulse, great thirst, vomiting, especially of fetid material, pupils widely dilated denoting approaching collapse, praecordial oppression, delirium.

2. When the head fails to advanced and recede with the puins.

2. Whed the head has rested so long on the pelvic flaor that we become apprehensive of sloughing of the parts and paralysis of muscles after labor.

4. When no advance is being made after proper administration of remedies and outside manipulation.

5. In convulsions where lise of the mother depends upon rapid delivery.

6. When the life of the child is threatened, as we know by the weakening of the fetal heart sounds.

7. In most occipito-posterior or pubic presentations.

8. When an arm or hand is up by the head and cannot be brought down.

9. In deformed pelves, where the degree of deformity justifies us.

We will never use forceps:—

1. Iu breech presentations.
2. Ossifed head, hydrocephalic head.
3. Monstrosities.
4. Great disparity between the head and pelvis.
5. When the antero-posterior diameter is less than three inches.
6. When the outlet is blocked by tumors or by morbid growths of any kind.
7. Where there is a short cord.
8. Unless the second stage of labor has continned more than twenty-four hours, with all evidences of nature's powers being exhausted.

The 13th Annual Meeting of the Tri-State Medical Society will be held at the Tulane, Nashville, Tuesday, Wednesday and Thursday, October 8th, 9th and 10th, 1901. The attendance promises to be large and an unusual attractive program will be presented. The railroads will give reduced rates.

Those intending to read papers should send titles to the Secretary, Dr. Frank Trester Smith, Chattanooga.

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Such is Fame.

The New York Times magazine supplement for June 16 is responsible for the following: "Some years ago," said Bishop Potter, in a recent speech, "I was traveling in Minnesota. A man approached me on the railway platform and scanned my features closely. 'Excuse me,' he said finally; 'but haven't I seen your picture in the papers?' I was compelled to confess that he might have done so. 'I thought so,' continued the inquisitive one. 'May I ask what you were cured of?'"—*N. Y. Medical Journal.*

Abnormal Pupils.

A thorough medical examination of the school children of the city of Dresden has revealed the fact that one-half the children are abnormal. The teachers are held to be to blame for this unhealthy condition of the children. In the future the inspection of the pupils and care of the sick will be more rigidly enforced.

"Paraldehyd" possesses many of the good without the evil qualities of chloral. Used in Insomnia resulting from varions causes The objectionable taste of the chemical is, to a great extent, disguised in Robinson's Elixir Paraldehyd (see page vi), which is an elegant preparation.

Irregularity of Heart Action in Fatty Degeneration of the Heart.

In the slight cases of fatty degeneration of the heart muscle occurring in connection with a general adiposity only very trifling intermission of the pulse may occur, and the author attributes this to the penetration of sub-pericardial fat into the substance of the heart, by which the ganglia of the same are more or less compressed.

When marked fatty degeneration of the muscles of the heart is present, the author has seldom failed to find some definite and recognisable change in the condition of the organ. The dulness was increased, and the heart-sounds more or less modified.

The prognosis in cases of persistent well-marked irregularity of pulse in stout patients is highly unfavorable. Death may occur suddenly, or, more gradually, through œdema of the lungs.

As regards treatment, the regulation of the diet is of the first importance, and the employment of the natural carbonic acid charged baths may be serviceable.—Dr. Kisch—Treatment, Aug., 1901.

It is said that Johns Hopkins hospital uses no drugs in the treatment of typhoid fever and yet has a larger per cent. of cures than any other old school hospital in the country.

Threatened Famine in Russia.

The annual struggle of the Russian agriculturist to snatch from the earth during the brief growing season enough food to supply his wants during the long winter has in great measure failed again this year. The cause for the failure this year is the same that reduced the yield of cereals in our own land, intense heat and drought, followed by torrential rains. According to the official report, only two provinces out of seventy have had good harvests, the rest running from below average to utter failure. There has been a very large yield in Siberia, but a distribution of food stuffs to those in the famine districts is impossible because of the few railways and the almost entire lack of passable roads. With the famine, which seems inevitable, will doubtless come the usual epidemics of relapsing and typhus fever.—*Medical Record.*

The Pathology of Dropsy.

The Pathology of dropsy was discussed at a recent meeting of the Pathological Society of London. Starling, (The Hospital, Aug. 31 1901) in opening the subject, said he would limit his remarks to the mechanical form of dropsy due to simple obsiruction as met with in uncompensated heart disease. The possible factors were numerous, but in all probability the factor of diminished absorption was negligible compared with those causing increased transudation. The capillary walls presented no opposition to diffusion, and there was always a change going on between the fluid within and that without the walls. The physical factors influenced filtration through the capillary walls, and this depended on (1) the intra-capillary pressure; and (2) the permeability of the vessel walls. The latter varied in different parts of the body—*e.g.* it was much greater in the vessels of the viscera than in those of the limbs. In dropsy, however, the fluid collected in the latter where permeability was most difficult. Rise of pressure alone would not produce œdema; it was necessary to alter the nutrition of the capillary wall—*e.g.* by injection of tissue fibrinogen. Thus everything seemed to depend on the state of the capillary walls; it was certainly so as regards mechanical œdema by pressure of a tumour. But cardiac dropsy was a little different, for apparently there was an actual fall of pressure in the capillaries in simple cardiac failure. It followed, then, that the prime change was not mechanical but in the capillary walls which became damaged by deficient nutrition and were then not able to stand even the normal blood pressure. Lazarus Barlow said he had found, experimentally, that it was possible to increase the venous, and therefore the capillary, pressure very considerably without the slightest evidence that fluid left the blood vessels or passed into the tissues. On the other hand it was easily possible to produce a dropsical condition of the dog's hind paw by completely arresting the flow of blood through the limb for an hour and then allowing it to again flow through the limb. The production of dropsy in this way was brought about more easily if the blood contained in the limb were simdly arrested than if the limb were rendered completely anæmic for an hour. This he explained by the supposition that starvation of the limb was a less potent factor than starvation combined with poisoning by the waste products of tissue metabolism. He believed that the real causes of dropsy were to be found in these two factors—starvation of the tissues and their poisoning by waste products. Upon this view the tissues would determine the occurrence of dropsy primarily and not the blood vessels. Sherrington remarked that it might be impossible to separate the action of the vessel wall from that of all the other tissues round it, but the vessel wall was the one constant element and justified the inference that this was the chief seat of change. Herringham said that thongh the mechanical was not a satisfactory explanation, whatever the immediate cause of dropsy might be, yet it was a factor which could not be ignored; for instance even in generalised renal dropsy if a patient lay on his right side the right side of the face would be more swollen than the left.

What Sanitary Science has Done for the Country.

The Census Bureau has issued a bulletin giving the mortality statistics during the year 1900 in the states and territories and in the principal cities where accurate records are kept. The total number of deaths reported for the year was 1,039,094, as against 841,419 for 1990. There was a decrease in the general death rate in the registration area of 1.8 per 1,000 population, a decrease of almost 10 per cent. The average age at death in 1890 was 31.1 yearsh in 1900 it was 35.2 years.—*Medical Record.*

The more a man tries to protect himself from illness by overclothing, shutting windows, and staying indoors for fear of catching colds, by overeating to keep up his strength, by idling for fear of overworking-the less likely is he to keep himself in vigor and in health.

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Broken Ribs Overlooked in Hospital.

We clip the following from the Medical Press. It shows how a little thought and a little pains will often ward off considerable embarrasment. The author says:

A curious incident was revealed at a London inquest last week. A woman slipped on the pavement one night and fell against the handle of a costermonger's barrow. Three days later she applied for medical assistance at the Western General Dispensary, where, it was stated in evidece, she said she had a sore throat and had fallen and injured herself. Her chest, however, was not examined, and next day she went to St. Mary's Hospital, where she was treated by the house surgeon for "laryngitis." Two days after the last visit a private practitioner who was called to deceased found her suffering from pnemonia, the result of five fractured ribs on the left side. She died from syncope on the following day. The jury expressed an opinion that a more careful examination of the patient would have revealed the existence of the fractured ribs. The history of a blow would naturally lead a medical man to examine the chest carefully, but it is only fair to say that the physician at the Dispensary denies that the deceased complained of anything beyond the sore throat. The Coroner Dr. Danford Thomas, very properly pointed out that in a case of the kind it was essential to baudage the chest. The fact is to be regretted that so serious an injury should have escaped detection by the medical officers of two London medical chari ties. An occurrence of this nature suggests the need of a revision of administrative methods.

The Mechanical Side of Surgery.

We are constantly being reminded that there are a great many things which the ever busy student is not taught. A surgeon inspiren no doubt by the fact that he resides in Toledo (Ohio), complains that students are not taught how to sharpen their scalpels. Now it is a matter of fact that a very large proportion of surgeons would further impair the cutting edge of a knife if they tried to confer upon it the indispensable sharpness. This consideration prompts the author to lay it down that no person should be allowed to practise surgery without first learning a mechanical trade. No doubt manual dexterity, however acquired, is a precious quality in every walk of life, but in deference to the principle of the division of labour we have allowed ourselves to fall into the habits of delegating these details to the surgical instrument maker. The important points to be remembered in "honing" a knife, it appears, are to pull it along the stone from heel to point with the cutting edge forward at an angle of about 45 degrees. When "stropping" a knife, on the contrary, it should be drawn from heel to point away from the cutting edge. If this information should be the means of obviating the necessity of any of our readers taking out a course in a workshop we shall have earned their thanks.—*Medical Press and Circular.*

Treatment of Internal Hemorrhage.

During the past three years subcutaneous injections of gelatin have been used with success in the treatment of internal hemorrhages by Quincke, Wagner and others. A series of these cases is now reported from Kiel by Dr. Grunow (Berlin klin, Woch., Aug. 12, 1901). The preparation used was a 2-per-cent. solution of gelatin in physiological salt solution; the quantity ordinarily used was 200 c.cm. Among 27 cases, including severe hemorrhages from the lungs, stomach, intestines, bladder, kidneys and aneurisms, but one case terminated fatally. The pain at the injection-site is usually severe and in some instances fever and a urticarial eruption follow, but these accidents are regarded by the author as of relative insignificance. The buttocks offer the most convenient site for the injection of the gelatin solution, as the tension of the loose tissues beneath the breasts differs in the various stages of respiration. The latter site is particularly to be avoided in pulmonary cases suffering from dyspnea. Sept. 7, 1901.—*Medical News.*

A St. Louis Physician Quarantines Himself with a Leper Patient.

Dr. Louis Knapp, aged forty, a practising physician of St. Louis, will isolate himself from the world to nurse Dong Dong, a Chinese leper, who was found in that city two weeks ago. The doctor, who is a graduate of a Detroit medical college, took final leave of his wife and four children on August 20th.

Dr. Knapp and his patient will live in a three-room frame house now being built by the city authorities at quarantine until necessity for his service shall have ended. Dr. Knapp will take his library to quarantine and will devote the greater part of his time to the study of leprosy. It is said that there were five other applicants for the position.—*New York Medical Journal.*

The Legislature of Alabamba during its last session enacted a law prohibiting so-called Christian Scientists and faith cure doctors from doing business in that State.

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The Prognosis of Traumatic Hysteria.

By far the larger number of cases are made the bases of personal injury claims, writes Pearce Bailey (Med. Rec., Aug. 24, 1901), and it is easily understood why a hysteric is often misjudged. The disease finds expressions in physical symptoms, such as paralysis, defects in sight, smell, hearing, etc. The normal sensory stimuli fail to be transferred to association systems, and the patient feels, sees, tastes, smells, etc., without being aware of it, and with a firm belief in his own incapacity. Since such belief is false hysteria deserves to be classed among the delusional insanities. It must not be forgotten that a fixed idea may disorganize the life of an individual as much as a surgical injury, and that it may take root so deep that it can never be gotten rid of. In traumatic hysteria, bad heredity makes the prognosis unfavorable, for instability of nervous function is the natural birthright of children of the insane, epileptic, alcoholic or other degenerates. In the author's experience, however, many of the victims of traumatic hysteria have as good family records as most people. The older the patient, the more likely are the symptoms to become permanent, especially in the presence of chronic diseases; alcoholism and arteriosclerosis being the worst. In the healthy and well-nourished there is more hope. Monoplegias usually recover rapidly, hemiplegias less rapidly, and paraplegias are most rebellious. Twitchings, hiccough, and choreiform movements are of little significance. Shifting, inconstant anesthesia is of more favorable omen than that which is profound and constant. Blindness and deafness may be serious, but affections of taste have accompanied the mildest only of the author's cases. If, after an accident, a patient could be isolated and cared for properly, he thinks we would hear very little of persistent traumatic hysteria. Likewise it is practically impossible for a patient to recover from this disease while money is at stake, so the longer the litigation is posponed the more permanent are the symptoms likely to be. Nevertheless the money is not the cause of the symptoms, and immediate recovery on receipt of damages is not to be expected. Indirect suggestion, by convincing the patient that he can do things which he thought impossible, is the most efficient treatment.—*Medical News.*

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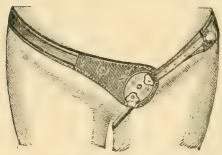

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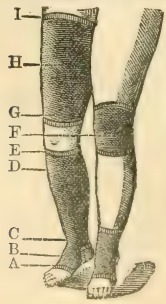

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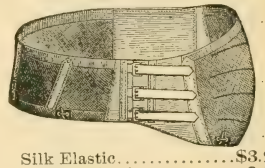

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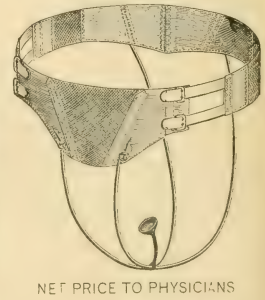

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Quinic Acid and Gout.*

Two years ago Weiss announced as the result of his experiments that quinic acid lessened the excretion of uric acid and increased that of hippuric acid in the human subject; and he recommended it as a therapeutic and prophylactic remedy in the uric acid diathesis, and more especially in gout. Combinations of quinic acid with other remedies for gout, such as citrate of lithium, piperazin, etc., have been recommended by various observers; and Nicolaier has recently experimented with one with Urotropin, called Chinotropin.

In spite of manifold investigations and many theories we still want an exact explanation of the nature and etiology of gout. Nevertheless, any remedy that will influence a prominent symptom, the pathological accumulation of urates, is welcome to us. There is by no means unanimity as to the action of quinic acid in the human organism. De la Camp has employed Chinotropin for his experiments, dreferring that for a variety of reasons to be mentioned later to the other quinates that have been tried. Two preparations were experimented with: a Chinotroyin II, composed of two molecules of quinic acid and one molecule of Urotropin, and Chinotropin III, containing four molecules of quinic acid and one of Urotropin.

The preparations were taken without the manifestations of any unpleasant by-effects at all. The upper limit in amount was 7.5 grams (112½ grains) of Chinotropin II, corresponding to 1.5 grams (22½ grains) of Urotropin. The cases consisted of one girl suffering from mild chlorosis, and three cases of acute gout. The first case was soon discharged cured. The three gout cases experienced relief under the administration of Chinotrodin, and the attacks were shortened to four, six, and seven days respectively. The patients had been treated in former attacks with all the various gout remedies, lysidin, piperazin, lithium, etc., and were doubtless well qualified to pass judgment upon the drug.

The reason why Chinotropin, rather than one of the other quinates, was selected by de la Camp, was on account of its combination with Urotropin. As Orlowski and Nicolaier have shown, Urotropin, after its passage through the human body, possesses marked uric acid solvent properties; which are entirely absent in lysidin, piperazin, uricedin, sodium bicarbonate, etc. This property depends upon the decomposition of the Urotropin in the body and the separation from it of formaldehyde, which forms extremely soluble combinations with uric acid. Hence it should be employed for uric acid concretions not only in the urinary passages, but anywhere else in the body where they may be present. A dose of 7½ grams (112½ grains) of Schering's Chinotropin II, containing 1½ grams (22½ grains) of Urotropin and 6 grams (90 grains) of quinic acid is the one that de la Camp recommends as always well borne. He was always able to demonstrate formalin in the freshly voided urine when Chinotropin bad been administered. The excretion, which previously often contained uric acid sediment in large amount, usually became clear by the second day.

Chinotropin is therefore to be recommended for further clinical experimentation as the best gout remedy that we as yet possess. Of course a proper dietary treatment, and the use of carbonated waters, as lately recommended again by Klemperer, must not be neglected.

The author concludes that quinic acid, even in large doses, is harmless. He advocates the employment of the quinate of Urotropin (Chinotropin) because the Urotropin itself is decomposed in the human body, rnd gives formaldenyde, which forms readily soluble combinations with the uric acid. And in urinary concretions more especially, Chinotropin is deserving of further experimentation.

THE "NEW" LIPPINCOTT MAGAZINE FOR SEPTEMBER, 1901.—A Knight of the Highway, Clinton Scollard; Paris Guy Wetmore Carryl; Winwood's Luck, Mrs. Burton Harrison; The Barbarous Babe, E. Ayrton; Mrs. North, "M. B. James"; Aspiration, Madison Cawein; What Happened After Mary McArthur Cut Her Finfier, S. R. Crockett; "Life and Death go Forth Each Day, Geraldine Meyrick; Fire-Flies, Cora A. Maston Dolson; Village Life in Mediæval England, Prof. Edward P. Cheyney; Two London Lyrics, I. Zangwill; The Independence of Silas Bollender, Paul Laurance Dunbar; The Happy Isles, Eben E. Rexford; In a Second-Hand Shop, Cr. Charles C. Abbott; Seriatim, Marguerite Merington; Books of the Month. Walnuts and Wine

In making applications to the throat do not have your applications "dridping" wet with the remedy. Sometimes some of the medicine drops into the larynx and the coughing defeats your efforts.

* Dr. de la Camp, Assistant the Clinic. (From the Second Medical Clinic of Berlin University, Director Professor Gerhardt, Medical Privy Councillor. Abstracted from the Munchener Wochenschrift, July 23d, 1901.).

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Death, Prophecy and Divorce.

Rev. Dr. A. C. Dixon, of Boston, recently preached an excellent sermon against "Christian Science." Among other things plainly said was the following: "Mrs. Eddy herself has had three husbands, and Calvin A. Frye, who owns until death, in his own right, conferred upon him by her, all her property in Concord, N. H., including her jewels, is not her husband. Two of her husbands died, one was divorced. Now, if Christian Science has power to heal it had no right to let these husbands die, unless such was its desire, but that does not argue for its loving character. If Christian Science fosters a spirit of love and harmony there should have been no divorce."—*American Medicine*,

A Colorado Marrage Law.

A bill has been offered in the Colorado Legislature to reguulate marriage in that State. If the measure becomes a law it will not be possible for any coupple to marry until after having submitted to a medical examination, and having been certified as sound in mind and free from tuberculosis, cancer, syphilis, and some other of humanity's woes. The examinations will be conducted by a board of examiners, which is to sit ten days in each month, and any one marrying without a license based upon the board's clean bill of health will be subject to heavy penalties.—*Record*.

Prevention of Pelvic Troubles After Labor.

During labor much may be done to prevent subsequent pelvic troubles. (*a*) Limiting the duration of labor. Vesico-vaginal fistula is an outcome of protracted labor, and may be prevented by the timely use of forceps. Too prolonged efforts to retard the delivery of the head, in order to prevent laceration of the perineum, may give rise to permanent relaxation of the muscular structures of the pelvic floor. (*b*) The immediate repair of lacerations which endanger the muscular structures of the *pelvic floor* is important. These repairs must be made with careful antiseptic precautions. Cervical tears need not be immediately redaired unless there is hemmorrhage. (*c*) Rigid attention to asepsis and antisepsis during labor will decrease the number of cases of chronic uterine and periuterine inflammations.—*Medical News*.

Treatment of Cirrhoses of the Liver.

At the recent meeting of the American Medical Association John H. Musser, of Philadelphia, in a communication to the Section of Medicine (Phil. Med. Journ., June 15th) divided cirrhoses of the liver into (1) those in which no symptoms occurred during life, the cirrhoses having been found at the necropsy, the patient dying from other causes; (2) those cases that were not suspected until such an accident as hemorrhage made it apparent, that is, latent cirrhoses of the latent; (3) cases with the symptoms of portal obstruction; and (4) on the other hand biliary obstruction. The lines of treatment were largely dietetic and hygienic, great care being taken to see that the functions of the gastro-intestinal tract were kept in action and the renal secretions properly regulated as well as the action of the skin. He uttered a word of caution in regard to the presence of hæmorrhoids. He had seen two or three deaths follow the operative treatment of hæmorrhoids, and at the necropsy cirrhosis of the liver was discovered for the first time. In all cases of hæmorrhoidal disease a thorough knowledge of the state of the liver should be known before any operative interference was advised. In the treatment of ascites occurring in cirrhosis he was accustomed to use mild purgation and calomel from time to time; he also used calomel 1-40th gr. dose every three hours as a diuretic. He also relied upon the old-fashioned pill, digitalis, squills and calomel. He also had considerable confidence in the use of the oil of copaiba. In any case of ascites he resorted to tapping early and frequently. The question of permanent drainage was then considered, and he referred to a case that was operated upon by Frazer; the abdomen was opened, the peritoneum was scarified, and the omentum attached. This was done twelve months ago and the patient was cured, there having been no recurrence.—*British Medical Journal.*

Quite a dilemma was produced a little while ago on the western circuit by the introduction of the word "dry-nurse" in an address to the court. This bewildered the judge, who asked if a dry-nurse was a nurse who dried babies after they had been washed. That solution did not occur to the learned counsel, who, after some hesitation, said he thonght it meant a nurse who was not addicted to drinking. Nobody seemed to know what the term really ment, though several more guesses were made, the last of them that a dry-nurse was one who could not amuse children.—*The Medical Times.*

Let the Hire be Worthy of the Labourer.

One reason why the public as a rule set so little store by medical advice is that medical men weekly allow themselves to be cajoled into perpetuating the popular belief, the product of the thought which is child to the wish, that for every disease there is an appropriate remedy. None better than the medical practitioner knows that in the vast majority of cases which come under his notice it is advice and not medicine which is needed, yet the courage fails him to declare the fact and to act on it. This may, as assigned by Dr. Goodhardt in his address at Cheltenham, be one reason why people accept and pay for advice from lawyers readily enough while they fail to appreciate medical advice pure and simple. Advice, he exclaimed, just think of it! A product of so unique a value, that when a man of great experience in the world of medicine dies his knowledge dies with him; no other man can supply his place, and there is a dead loss to the community of a mine of realized information. Referring to a very very clever signboard in which a bullock is seen gazing yearningly upon a small jar of meat extract and exclaiming "Alas! my brother," he said he wished he could pot brothers as they fitted from off the stage; his trouble was that his great masters died unbottled. And yet we "give" advice, and there are those in number who not only accept but ask the gift. And this advice, it has been asserted, is dispensed upon the strictest trades union principles which have been defined as "doing the worst possible work at the highest possible price." Why, it is notorious that such is the generosity of medicine that there is not a needy person in the whole kigdom who cannot, if he need it, obtain the best opinion in the country gratuitously. The clergy, the army, the navy, artists, actors, actresses, clerks, artisans, and others, pour into a doctor's room or the hospital asking alms in the shape of advice and never get a refusal. And after it all we are insulted by being called trades unionists—"men who do the worst possible work at the highest possible price!" Verily we have ourselves to thank for this in great measure, for we belittle the value of our advice in allowing the public to exalt so greatly the supremacy of mere physic. The labourer is worthy of his hire is but one side of the question, and not the best side, for it might be held to cover many a sordid act; the other and much the more important is surely this, "See to it that the hire is worthy of the labourer," in the form of the higher and nobler recompense of dignity and self-respect.—*Medical Press and Circular.*

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TROPHONINE,

a palatable and nutritious liquid food, contains the nutritive elements of beef, nucleoalbumen, and wheat gluten, so prepared as to be readily absorded and aid almost immediately in the process of reconstruction. It furnishes the sick with the largest possible supply of nourishment and with the minimum tax on the digestive organs.

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acts by increasing the number of leucocytes, destroys toxic germs, increases the inherent resistance to disease, quickens glandular activity, arouses the nutritive forces, gives tone to the system, and stimulates cell-life throughout the organism.

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is the only perfect digestive. It digests every variety of food. In physiological activity it presents the active and mother ferments of the entire group of digestive organs. It aids digestion by furnishing an additional supply of protoplasmic material out of which active ferments are elaborated, and perfects the process by increasing cellular activity.

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Antikamnia and Heroin Tablets.

Our readers will find in this number the announcement of a new remedial preparation, viz :—"Antikamnia and Heroin Tablets," each tablet containing 1-12 grain of Heroin Hydrochloride (muriate) and 5 grains Antikamnia. All members of the medical profession should familiarize themselves with this combination and we respectfully advise our readers to look up the advertisement and send for samples. The The advantages of this tablet are fully illustrated by the report of cases submitted by Dr. Uriel S. Boone, Professor of Pharmacology and Surgery, College of Physicians and Surgeons, St. Louis. We reprint three of said cases, as each has some particular feature which successfully called into use in a most beneficial manner, the synergetic action of these two drugs :

Case I. J. P. Athlete. Suffering from an acute cold. On examination found temperature 101 deg. with a cough and bronchial rales. Patient complained of pain induced by constant coughing. Prescribed Antikamnia & Heroin Tablets, one every four hours. After taking six tablets, the cough was entirely relieved. Patient continued taking one tablet three times daily for three days, when he ceased taking them and there has been no return of the cough or pain.

Case II. Ed. H. Age 30. Family history —hereditary consumption. Hemorrhage from lungs eighteen months ago. His physician had me examine sputum; found tubercle bacilli. After prescribing various remedies with very little improvement, I placed him on Antikamnia & Heroin Tablets, prescribing one tablet three times a day and one on retiring. He has since thanked me for saving him many sleepless nights and while I am aware he never can be cured, relief has been to him a great pleasure and one which he has not been able to get heretofore.

Case III. Wm. S. Age 28, Lost 25 pounds in last 30 days. Consulted me July 9th. I thought he most certainly would fall victim to tuberculosis. Evening temperature 101 deg. with night-sweats and a very troublesome cough with lancinating pains. Prescribed 1-100 gr. atropine to relieve the excessive night-sweats and one Antikamnia & Heroin Tablet every four hours, with the result that he has entirely recovered and is now at work as usual.

Neither in those, nor any other of my cases, were any untoward after-effects evidenced, thus showing a new and distinctive synergetic action and one which cannot help being beneficial and useful in both patient and physician.

An Important New Law in Tennessee.

An Act to prevent the substitution of any drug in filliug physicians' prescriptions by druggists in the State.

Section 1. Be it enacted by the General Assembly of the State of Tennessee, That it shall be unlawful for any corporation, firm or person, or any combination or association of corporations, firms or persons engaged in the business of buying, compounding and selling drugs and medicines to substitute any drug or medicine in lieu or instead of that given to the patient by the physician on the face of his prescripiion.

Sec. 2. Be it further enacted, That it shall be unlawful for any agent or employe of such person, firm or corporations engaged in the business of buying and selling drugs in this State to substitute any medicine for the specific medicine mentioned in the physician's prescription.

Sec. 3. Be it further enacted, That any person, firm or corporation violating the provisions of this act, or aiding or abetting the violations of the same shall be guilty of a misdemeanor and upon conviction shall be fined not less than $25 nor more than $100 for each and every offense.

Sec. 4. Be it further enacted, That this act take effect from and after its passage, the public welfare requiring it.

Approved April 3, 1901.

Reduced Rates to San Francisco and Return.

For the occasion of the General Convention of the Episcopal Church at San Francisco October 2d, the Southern Railway will sell round trip tickets from Washington, Alexandria, Charlottesville, Lyhchburg, Richmond, Norfolk, Greensboro, Charlotte, Asheville and contiguous main line points at $65.25. Tickets will be on sale September 18 to 26th, with limit on going trip to October 2nd, and final return limit November 15th, returning either via same or another route. Through excursion sleepers are operated the year round from Washington to Los Angeles and San Francisco without change leaving Washington Monday, Wednesday and Friday each week. This will afford four departures for Episcopal Convention. These excursions are personally conducted and afford every facility for comfort, convenience and economy. For further information apply to any Southern Railway ticket agent, to S. H. Hardwick, G. P. A., or to A. J, Poston, General Agent, 511 Penn. Ave. n. w., Washington, D. C.

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of chemically pure Lecithine for hypodermic injections
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Yellow Fever.

The discovery of at least one mode of infection in yellow fever—a discovery of the highest importance to mankind—emanates from America. For some time past several of our American colleagues, stimulated by recent observations in connection with malaria, have sought an experimental verification of the hypothesis of Finaly and others, that yellow fever also is communicated by the bite of gnats, Insects feed on patients were subsequently induced to bite healthy persons who volunteered for the experiment. The results were negative until the gnats were kept for an interval of twelve or more days between the two operations. Success was now immediate. Drs. Reed, Carroll, and Agramonte record in their last report that out of seven non-immune persons subjected by them to the bites of infected mosquitoes, six yeilded undeniably positive reaction. At the same time, seven non-immunes whom they endeavored to infect by means of the fomities of patients under peculiarly favorable circumstances, remained in every case free from the disease. The experiments were conducted under the most stringently scientific conditions. Although the mosquito theory of yellow fever does not posess the parasitological basis of the mosquito theory of malaria, the differential observations of Reed, Carroll and Agramonte are of a nature to leave no doubt concerning the soundness of their conclusions. Some of the tests have involved great heroism on the part of those who were subjected to them. Since the death of Dr. Jesse W. Lazear we have to deplore that of Dr. Walter Myers, one of our most promising young pathologists, who lost his life from yellow fever when on a deputation from Liverpool to study that disease.—*Medical News.*

Carbuncles.

The treatment of carbuncles recommended by Carothers is prophylactic, abortive, medical and operative. Many cases can be prevented by cleanliness and where damage to the kidneys and liver exist these should be looked after. If seen in its beginning the carbuncle can be aborted by injection of a few drops of carbolic acid, or a white hot needle thrust into the center of the inflammation. In more advanced cases he used a sharpened stick of caustic potash thrust down to the underlying fascia in the centre of the carbuncle producing a necrosed crater and this releiving tension and avoiding the more extensive operation of the extirpation. The medical treatment is the relief of pain by tonics, diet,etc. He prefers for the local treatment equal parts of castor oil and turpentine applied to the carbuncle on absorbent cotton or gauze, which is to be kept thoroughly saturated. It releives pain at once so that in most cases no narcotic is required. It prevents suppuration. He first limits the inflammation and promotes granulation. The most rational operative treatment is the burning away of the entire mass with the actual cautery, creating the carbuncle into a burn of the second or third degree. He does not look with favor on the cutting operations, especially the crucial incisions or curette, which may do serious damage.—*Journal American Medical Association.*

Sympathy Between the Eyes and Teeth

To cases of neuralgia of the eyeball and surroundings produced by dental irritation McQuillen added an important report, a case of severe attack of neuralgia of right side of face, extending to the temporal and frontal region and involving the right eye. Her physician being under the impression that the teeth were at fault, brought her to him. The pulp of the right canine was found exposed; four of the other teeth were also badly decayed, and it was thought advisable to extract all of them and made a new place of the defective set which the patient was wearing at the time. There was not the slightest recurrence of the neuralgic prins. McQuillen adds that if every physician recognized the importance of a prompt examination of the teeth under similar circumstances, a great deal of unnecessary pain could be spared their patients.—*Journal of Ophthalmology.*

To the Physicianc of North Carolina:

Mr. Brimley, Curator of the State Museum, has asked me to say that he is desirous of collecting all the material possible for the purpose of forming a pathological exhibit in the museum here. A number of local physicians have contributed to form the nucleus of this collection. The Curator would be glad if all the physicians in the State would send him (at his expense) all morbid specimens, monsters, tumors, rare growths, and the like, which they may find from time to time and which they themselves do not care to keep. The specimens will be mounted and preserved, being, however, at the owner's demand any time. Address, H. H. Brimley, State Museum, Raleigh, N. C.

Very truly yours,

H. A. Royster, M.D.

Raleigh, Sept. 7, 1901

The Charlotte Medical Journal.

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Sigmoidopexy for Prolapse of the Rectum.*

By D. M. Mott, A. M., M. D. I. S. M.
Officiating Professor of Anatomy Medical College, Calcutta, India.

The surgical treatment of prolapse of the rectum depends on its degree. If partial prolapse,—caustics, cautery or excision of the mucous membrane are the usual methods in vouge. If complete, then incision of the whole thickness of the bowels and suture of the out edge to the anal margin is the operation chiefly practiced. The operation is a good one, but it has its drawbacks. It is tedious, entails loss of blood, there is danger of peritoneal infection, and great care must be taken to avoid strain on the sutures, which do not always hold. Moreover, there is the risk of the sphincter action being lost, and the certainty of delay in its being regained.

As far back as 1892 I learnt a much simpler method from Brigade-Surgeon Kenneth McLeod, Professor of Surgery at the Medical College Calcutta, He published an account of his operation in "The Lancet" of the 19th July, 1890. This consists in the passing a rectal bougie up to the sigmoid flexure, and then cutting down on the bowel from the anterior abdominal wall in the left iliac region. The sigmoid is then sutured to the anterior abdominal wall, and the wound closed. Last year I had an opportunity to putting this operation into practice with most gratifying results.

P. D., a male Hindu, 42 years of age, a weaver by trade, was admitted into the Chittagong Hospital in a most pitiable condition on the 16th of October, 1900. He was weak, emaciated, and very anæmic.

Partial prolapse commenced a dozen years previously, and had gradually become complete.

On admission the prolapse was found to be extensive and complete, and intensely congested, because the patient had been unable to return it for many days. About 8 inches of mucous surface were exposed as a tense, raw, excorated, ulcerated and bleeding mass. It was not altogether an easy matter to reduce the prolapsed bowel even under chloroform. For over a fortnight he was kept quiet and allowed to gain strength, and during this time the prolapse recurred with each motion, though the patient experienced no such difficulty in reducing it.

On the 6th of November, 1900, the following operation was performed:—A two inch incision was made a little internal to the anterior iliac spine, the muscnlar layers were separated according to the direction of their fibres, the peritoneal cavity was opened, and the index finger was inserted to search for a bougie introduced per anum and held by an assistant. The sigmoid flexure was thus quickly found, hooked up by the finger, and fixed by two stout catgut sutures to the inner side of the wound in the abdominal wall. The sutures pierced the peritoneal and muscular coats, but of course the mucous lining was left intact. The peritoneum was closed by catgut sutures, the transversalis and internal oblique were brought together by silkworm gut. The external oblique was joined by strong catgut, and the skin incision was closed by interrupted horsehair sutures. For the first day he was given one grain of opium every four hours, three grains on the second day, the same on the third, and for the fourth and fifth days two grains on each day. All this time there was no fever nor tymanites. On the sixth day his bowels were moved by castor oil emulsion. On the seventh day he was dressed for the first time, when the wound was found healed.

The progress of the case was uncomplicated and quite uneventful. There was no return of the prolapse.

He was induced to remain on in hospital until the 9th of December 1900, i.e., over a month after operation, when he returned home at his own request. During the last ten days of his stay he went about helping with the ward work. He was examined on the day of his discharge, when the rectum was found to be quite healed and healthy, and there was no tendency to prolapse on his bearing down.

Mr. Treves has described Professor McLeod's operation in his "Manual of Surgery," Vol: II, page 685, as a "very

*Written especially for the Charlotte Medical Journal.

extreme measure." With due deference to his authority I consider the sigmoidopexy operation much simpler, more rapid of performance, and causing less shock or loss of blood than in the case of a complete excision, and as having no more risk than any other laparotomy operation.

Ovarian Tumors Requiring Removal, with Report of Cases.

By E. C. Davis, M.D., Assistant Surgeon of the Halcyon Dr. J. B. S. Holmes Sanitarium, Gynecologist to Presbyterian Hospital Atlanta, Ga.

To endeavor to consider all the different forms of tumors of the ovary would consume too much time, and in all likelihood prove prolix and tiresome. Ovarian tumors by many comprise all tumors of the ovarian region, including those of parovarium as well as the ovary proper, and while the treatment of both classes is very similar, the origin and histological structure vary very much. Strictly speaking, ovarian tumors have their origin either in the oophoron or in the paroophoron. In addition to these tumors which are usually cystic we may find solid tumors of the ovary which may be fibromata, myomata, sarcomata or carcinomata. These latter are not of very frequent occurrence and, as a rule, are very difficult to diagnosticate. Their location and separation from the uterus and history, together with bimanual examination tend to aid us in making a diagnosis, but this often fails and the diagnosis is only made after an exploratory incision with careful examination by touch, sight, and microscopical examination of diseased structures. These tumors when benign and producing no disturbances may be treated expectantly, but, as a rule, the results will be more satisfactory if the tumor is removed when discovered before producing disturbances and making serious inroads upon the nervous system, or through infections due to trauma, or by inflammation produced by other causes, producing adhesions which may aggravate the disturbances or render the removal much more difficult and dangerous. Hence it is much more easy and satisfactory to removed as early as detected solid tumors of ovary whether they be benign or malignant. In malignant tumors we should not only remove the tumor but the uterus, tubes, and if only one ovary the other as well, doing a complete hysterectomy. In cases of malignancy, if the adhesions are dense and the malignant processes have extended high up into the broad ligament, then no operation is advisable as it would only hasten the fatal termination and cause needless suffering without the utmost hope of benefit or relief. Early and radical operations should be performed for sarcoma or carcinoma, and in such cases it is much safer to sacrifice some healthy tissue than run the risk of leaving some parts which may contain elements of malignancy.

But few solid tumors of ovary have come under my observatien, one of carcinoma, now convalescing from a hysterectomy performed by Dr. Holmes only a few weeks ago, through whose courtesy I was allowed to see and assist in operating upon, is the only carcinoma which I have seen of ovary.

Of ovarian cysts there is no end, and these vary in size from that of slight enlargement of the ovary to enormous sizes. We rarely find these tumors assuming the mammoth proportions which they formerly attained on account of greater ease of removal, and the education of people to such a point as to have less dread of an operation and more encouraging prospects of recovery. No article is complete without accrediting to Ephraim McDowell the honor of inaugurating this operative relief in spite of efforts of Europeans to detract from his glorious record, and to accord this to some of their co-workers. We honor the European workers in their efforts to advance medical science, and they have done most excellent work, at the same time we cannot fail to condemn the efforts that some of them make to claim everything that originates in their own and our country as well.

Ovarian cysts have their origin either in the oophoron or paroophoron. Cysts originating from oophoron are unilocular, multilocular or dermoid. The first and second of these probably begin in their development in the Graafian follicles. The dermoids have an obscure origin and are very peculiar tumors containing usually a thick oily substance, fluid at the temperature of the body, but solid or semi-solid when cold, they may contain hair, teeth, nails, bones, sebaceous matter, mammary gland, unstriped muscle, etc. These tumors easily break down and become suppurative, and often contain fluid which when placed in contact with the peritoneum set up most active and violent sepsis. They occur at all ages, from infancy to old age, and should be removed as early as recognized. The tumors that originate from paroorphoron, as a rule, are smaller and occur usually not earlier than the twenty-fifth year of age. They contain many papillomatous growths, but should not be considered as the only tumor of the ovary containing papillomata, as there are other papillomatous tumors

which develop from other tissue than the paroophoron. These tumors must not be confounded with other papillomata with which they are often confused, but as the treatment is very similar, a mistake of this kind results in no serious consequences.

It has been my good fortune to assist in the removal of many ovarian cysts during the past six years of association with Dr. J. B. S. Holmes in his private hospital. Most of the types have been encountered, both of the solid and cystic tumors.

I wish more especially to call attention to several cases of my own occurring in very young women from whom I removed ovarian cysts.

Case 1.—Miss I. H., Douglass County, Ga. Patient referred by Drs. T. R. Whitley and J. R. McKoy, Douglassville, Ga. Age 18; tumor observed eighteen months previous and had increased rapidly in size, especially for six months previous to my visit. Menstruation regular. On examination found an enormous cystic tumor which was removed with the assistance of Drs. S. T. Barnet and Beck. The tumor proved to be a very large multilocular oophorotic cyst, adherent to abdominal walls, to pelvis and to abdominal viscera. The fluid was so thick and tenacious that little would pass through the ovarian trocar. The cysts were small and very numerous. The fluid removed was collected and measured by Dr. McKoy, measuring six gallons; much was spilled on the floor, and the walls of the tumor were very thick and many cysts were not emptied. This necessitated quite a long incision. The operation was performed in a small farm house, and the size of the tumor must be purely speculative as there were no available scales, I should estimate between sixty and eighty pounds. The patient was profoundly shocked after completion of operation, but reacted well under the use of saline enemata and stimulants, making a complete recovery and being enabled to attend arduous duties on farm.

Case 2.—Mrs. H., Atlanta, age 16, married at 15 years, menstruation regular, but suffers greatly before and during flow, pain so severe as to produce marked hysterical manifestation. Examination showed cyst of ovary about the size of a large orange on right side, and ovary on left undergoing marked cystic degeneration. Operation was performed, assisted by Drs, J. B. S. Holmes and J. D. Cromer, removing both ovaries and tubes. With exception of some infection of stitches patient has done unusually well and made a good recovery.

Case 3.—Miss B. Fla. Age 20: Consulted me on account of severe pain in both sides which was always present, greatly aggravated upon exercise, and as she was saleswoman in a large store and obliged to earn her own livlihood this was becoming quite a serious matter with her. She suffered greatly before and during her menstrual periods; Her nervous system showed the effects of this suffering and she was rapidly verging upon chronic invalidism. One year previous while riding a bicycle she sustained a fall and has suffered almost constantly since with greater severity on right side. On examination I found exagerated antiflexion of uterus with prolapsed right ovary, slightly enlarged and exquisitely sensitive; The left ovary was enlarged and very tender though not prolapsed. In this case hoping by a conservative operation to preserve the ovaries, curetted the uterus and endeavored to correct antiflexion by insertion of cervical stem pessary. This was done, but in two months patient was in as bad condition as before operation, She returned to the hospital and with the assistance of Drs. J. B. S. Holmes and M. M. Hull both ovaries and tubes were removed. The ovaries were found with small paroophorotic cysts. Her recovery was uninterrupted and she has been enabled to resume her duties in better condition than months previous, although only about four months have elapsed since the operation was performed.

Case 4.—Mrs. T. Mississippi. Consulted me on account of profound nervous depression which had almost unbalanced her mind. She was suffering from severe pain in sides, extreme pain during menstrual period, before and during flow. This had been in existence for several years and she had consulted a distinguished gynecologist who had performed a curettage and inserted an enormous hard rubber pessary. On examination I found laceration of perineum almost to verge of anus, prolapsed uterus to second degree, retroverted and subinvolvuted, right ovary containing cyst as large as hens egg prolapsed resting between pessary and fundus of uterus, left ovary enlarged and tender with cyst. Now inasmuch as this uterus was so much diseased and both ovaries and tubes must be sacrificed, advised abdominal hysterectomy, which was performed with assistance of Drs. Holmes and J. D. Cromer. Patient has made an uninterrupted recovery with complete relief of pain, but as yet mental condition has not entirely resumed its normal condition though markedly improved.

In all of these cases except No. 2 the appendix vermiformis was removed as I believe it is wise to remove this when the

abdomen is opened and conditions are favorable for its removal.

It will be observed that I have not gone fully into the histories of these cases as to do so would prove tiresome, so I have only endeavored to mention the principal symptoms which possess special interest and the plan of treatment adopted with results. I should have mentioned that tampons of Icthyol Glycerine were regularly used in cases No. 3 without any relief to symptoms whatever.

In cases No. 1, 2, 3, the youthfulness of the patients is one of the most interesting features, and while in two of the cases conservatism was practised it proved of no value and more radical measures were necessary before any relief was procured.

These cases have proven of great interest to me and I trust their recital may not be tiresome and uninteresting.

Some Suggestions of the Treatment of Fractures of the Shaft of the Femur.*

By H. P. Coile, M.D., Knoxville, Tenn.

No one method of treatment of fracture of the shaft of the femur is suited to all cases. The age of the patient, the location and character of the injury are to be considered in deciding the kind of splint or apparatus to be used. As a rule the splint that will retain the fractured fragments of bone in the most perfect apposition until union has firmly taken place is to be selected.

The object of the writer is to speak with special reference to the use of the plaster of paris dressing in suitable cases and to mention the manner of adjustment of the same during the progress of the case. As a rule fracture in the lower part of the bone is more easily treated than at the middle or upper part, no matter what dressing be used, but plaster of paris is, in my opinion, to be given preference in all ordinary cases where the fracture occurs at the middle of the shaft or below. Neither is its use to be restricted to simple fractures, but with proper precaution and management may be used with safety and efficiency in the treatment of compound and comminuted fractures.

The proper application of this dressing requires tact and care. The patient should be placed on a table and the limb thoroughly scrubbed with soap and water and afterwards rubbed with alcohol. If an injury be compound or compound and cominuted, the injured soft parts are to be thoroughly cleansed and treated with a 1-3000 solution of bichloride of mercury, detached fragments of bone having been previously removed. Bone whose periostium is not detached may be allowed to remain. In case the fracture is caused by a gun shot wound, it is necessary, after giving the anesthetic, to cut freely down to the bone and remove the bullet or shot and other extraneous substances if present in the limb. In this instance the suturing and ligaturing of the fragments may in some cases be advantageous. The limb thus prepared should be oiled with sterilized oil and carefully enveloped from the toes to the hip with absorbent cotton, taking care to have an abundant amount of cotton smoothly applied and giving especial attention to the protection of bony prominences, then, snugly apply over all a dry gauze bandage. The plaster of paris is next applied beginning at the toes and ascending the limb in the usual way, while assistants make extention and counter-extention, the surgeon having placed the fragments in perfect apposition. The extention must be kept up until the plaster becomes firm. The patient being under the anesthetic, no muscular resistance is offered and with proper care there should be no overlapping of bone. The plaster will be firm before the patient recovers from the anesthetic and no shortening need occur subsequently. As before stated, it requires tact and care to so apply this dressing that just the requisite amount of support will be given. No competent surgeon would think of applying such a dressing and neglect to make careful examination of the case within a few hours to see that no harm is resulting by too much swelling or by the bandage having been applied too tightly. Neglect of this precaution has, I am informed, resulted in loss of limb.

Compound or compound and comminuted fractures thus treated should be provided with a special antiseptic dressing before the application of the plaster of paris. Within a few hours a window may be sawed out of the case at a point corresponding to the injury of the soft parts. This will admit of inspection, drainage and treatment. Treated as above outlined, no extention apparatus need be applied, the requisite extention being made by the plaster of paris dressing fitted snugly around the ankle and foot.

As the case progresses there will be muscular atrophy and the dressing will become too loose. This is to be obviated by sawing out a narrow strip of the plaster casing from the upper end to the ankle and drawing the edges of the cast together where they are securely fixed by strips of strong

*Prepared especially for the Charlotte Medical Journal.

adhesive plaster. This method is better than the removal of the entire case as it can easily be done without disturbing, in the least degree, the bones where union is beginning. This is an important matter for it is impossible to remove the plaster cases and apply another without such disturbance and consequent injury. It is easily done provided the cast has not been made unnecessarily thick. Later in the treatment, when further atrophy has occurred, another strip is removed and the plaster case again tightened. In this way the bone is held securely in the original position until union is perfect. It is unnecessary to flex the limb at the knee joint in order to secure necessary extention as this is best secured from the foot with the limb dressed in extention. Neither is any other extention apparatus to be applied. The plaster cast affords the requisite degree of extention which has the advantage also of being constant and uniform. The limb dressed in extention is under better control of both patient and surgeon.

When the bone has firmly united, the entire dressing is to be removed and the necessary after treatment instituted.

Much of detail has been purposely omitted from this paper as it was desired to emphasize only the following points.

First: That plaster of paris furnishes a suitable and efficient dressing for a large number of cases of fracture of the femur whether simple, compound or compound and com minuted.

Second: That it is best applied while the patient is under complete anesthesia, extention being made until the plaster becomes firm.

Third: The dressing thus applied affords perfect support to the fractured bone and obviates the necessity of other means of extension.

Fourth; It should not be removed until complete union has taken place.

Fifth: It's perfect fit to the atrophying limb is best secured by sawing out as required from time to time longitudinal sections of the cast, and drawing the edges together, firmly securing same with adhesive plaster.

Ethics of City Physicians.

By Dr. S. A. Oren, Lanark, Illinois.

The writer does not care to use the recognized quack, whose display advertisements of cure alls and promises meet our gaze in the daily metropolitan papers, advertising circulars, &c., but only the ultra ethicals, such men as are members of medical societies and associations, agreeing to abide by the Code of Ethics and all that the term ethical means.

Do you know that many of these men hid away in the confines of our cities are the most ethical pretenders on earth and the worst pirates and parasites from an ethical standpoint extant.

Let us cite a few of the many ways some of our city M.D.'s do business:

Hospital on the Lake Shore, advertises in the ultra ethical journals. "*Dr. Blank*," we will call him, is proprietor, with a long line of so-called (city) ethical physicians and surgeons on his staff. Out of the city, 120 miles, this same "*Dr. Blank*" puts up at a hotel, avoids the physicians of the town; learns by some means where different afflicted people live. Walks into their homes while *patients are under care of the local physician*. Introduces himself as "Dr. Blank" from the City Hospital on the Lake Shore, tells of the great cures being effected there, makes promises galore; guarantees a cure if necessary; draws up a contract for $25.00 a week for board and nursing, with a stipulated fee for surgical operation, this fee, if necessary, *payable* only when *cured*. Patients go, remain as long as their cash and patience hold out, and return in most cases without benefit.

This is an actual occurrence under the observation of the writer—not only one, but seven cases were surreptitiously taken from under the care of the physicians of one town. Two of the seven were possibly benefited; one made decidedly worse, and four are in about the same condition as they were, with some experience and less cash.

A remarkable example of the way this piracy is excused was illustrated when the writer was telling the above to one of the staff of this same hospital. "Why," said he, "I was not aware that 'Dr. Blank' did business that way, but his expenses are very high and I suppose he is compelled to do that way to keep up."

When physicians call at this hospital they are treated nicely, their business is solicited and they are assured that the hospital is run on "*strictly ethical lines*," and I am sorry to say that many country physicians are to-day taking or sending cases to this same hospital when they should be treated at home by the family physician.

We will next call attention to a former professor in one of our leading Medical Colleges, "member of American Medical Association," President of a State Medical Society in one of the Western States, &c. Being conscientious, city broken and strictly ethical as the world goes. We will call him *Dr. Spread* for lack of a more suita-

ble name, buys an old hotel, fixes it over as a sanitarium, associates with him a couple more ethical gentlemen of the profession and organizes the "*Hoop 'em up*" sanitarium, and then advertises the great benefits and cures effected there, avoiding, of course, using the pronouns *I* and *we*, "but just as effectually advertising themselves," and equally as adroitly soliciting the legitimate business of the lay fraternity.

One more ethical M. D. and the writer will rest his quill.

By following up an advertisement in a strictly ethical medical journal we were referred to a newspaper advertising agency. Being curious we called and were conducted to a suite of rooms on the sixth floor of one of our city buildings. This suite contained a book-keeper and stenographer in one room, and some medicine in another, with a small dingy waiting room as the third; *no* doctor in attendance, and the business almost entirely done by correspondence. On the door a plain sign reads "*Dr. Quack*," we will call him. On the seventh floor of this building, among other ethical physicians, is the office of one very ethical, we will call him "Dr. Please-em." When a patient calls at "Dr. Quack's" office he is informed that the doctor will be in in a minute, and is seated. Then the book-keeper touches an electric button on his desk, which rings an alarm in "Dr. Please-em's" office, and this doctor quickly appears as "Dr. Quack," examines the patient, prescribes the quack nostrums of the sixth floor office and returns to his ethical quarters where, of course, he left his conscience, and appears as ethical Dr. Please-em once more.

The preceding are stearn realities, as black as they may appear, and there are many others equally despicable. Is it not time that the country physician should wake up, brush up, and attend to their own legitimate business at home, where it belongs, rather than feed men of this character?

Hospitals in the Smaller Towns.

By A. L. Beacham, M.D., Canandaigua, New York.

Hospitals where the sick may be cared for are a necessity. In the larger centres of human activity their usefulness has so long been accepted that it would be idle to demonstrate any reason for their establishment. The hospital principle may be embodied in a study of any hospital proposition whatever the scope of its work.

A recent writer states that hospitals in the smaller cities and towns deserve to rank alongside the discovery of anesthetics as among the most important advancements of medicine and surgery of the past century. No philanthropy nor charity appeals so strongly to our natures as placing within easy reach the means of relieving the sick and wounded sufferers of each and every community. It is an important subject how to develop hospitals and adjust them to the needs of smaller communities than those in which they have been established. Should the plan be that of benevolent and charitable institutions and incorporation be sought under the New York State law now in vogue over a half century, or should some modification of this valuable old working model be adopted. What machinery is required to render available a hospital suited to the needs of other communities than those now served in order to extend the work and service in the interests of the individuals to be reached and benefited? The community embraced in the section to reap the reward, and the workers to be fitly recompensed.

The private hospital, with personal supervision and individual administration, has its advantages in direct responsibility, grasp of situation and quick correction of errors. These hospitals are often the outgrowth of an individual's desire to do better work and are frequently established after experience of service in a public charitable institution. The discussion of preferences between a public and private hospital service for the sick and injured demands a careful consideration of expediency and adaptability as well as what constitutes high class service and promises ideal results.

A feasible plan for the lesser population of urban communities, to meet the needs of all classes would not fit the requirements of a greater population. The different types of patients require different methods of care, but the aim should be to secure equally good results, or any and all plans and methods of practice are not worthy our emulation or esteem.

The work of no hospital should stand unrebuked or unchallenged whose results and whose care of patients can be justly criticised. A standing menace and a disgraceful assumption exists in the classify. ing of patients. Wards should be abolished. Rooms that communicate with doors between, that nurses may occupy adjoining rooms, and isolation or free ventilation secured, as the case may require, are best. No one patient cared for in an institution is of better clay than another. Wards weaken and make slattern nurses. No nurse should know the price paid by a pa-

tient. No room should have a tab with price mark attached. Severe cases should have the best rooms. The less furniture and the best kind for the purposes, gives the cleanest rooms and the most comfortable quarters. The floors should be of hard wood, well seasoned and covered with thin dressings that water and soap, if necessary, can be used in cleaning, and they should be bare and redressed very frequently, making as pleasing an appearance as any fabric can give and the safest sick room floor known. The walls should be painted with a washable mixture and our own preference after a body of white lead and oil is white zinc and turpentine which makes a clean appearance, is capable of withstanding hardships of cleaning, shows when soiled and can be reapplied quickly when sepsis has occurred in the room or on that floor. It is a dull finish and does not tire the eyes. Wood work and doors are to be of natural wood filled and varnished and revarnished, or washed with turpentine and water as often as required. No drains in the building proper, these being placed with closets and baths, laundry and kitchen in an annex, will give an aseptic place for hospital work and if the ground for the building has been properly selected regarding soil and surroundings, we have perfect situation, proper complements and may expect good results.

Remodeling of old buildings is not a consistent course, The building should have a southern or eastern exposure in our country, have no filling under or about it, and should not be placed among trees whose soil has not been stirred to rid it of the humus and natural noxious principles common to such soil. It should be centrally located in a town, so that during convalescence the activities of the place may give stimulating diversion rather than lonesome isolation and depression.

In the work with which I am affiliated, The Beahan Hospital of Canandaigua, N. Y., the village comprises 6,000 inhabitants with contiguous territory of as many additional people. The hospital is incorporated by eight physicians of all the various practices. Each physician and surgeon has control of his own separate work and interests without hindrance. They together constitute its directors and manage its interests. It is a business corporation. It conserves all the interests of local hospital demands without weakening the pecuniary rewards of its members, and stands ready with open overtures to care for the indigent and needy as occasion demands when voiced by the charitable instincts and philanthropic purposes of citizens whose sentiment and hearty co-operation is elicited and encouraged. The project does not interfere with associations whose functions shall be the care of the sick and afflicted poor, but will lead to the formation of such auxiliary bodies.

This result obtains because of advanced and fortunate professional conditions. The new era of medicine where the best energies of medical and surgical work are directed to the legitimate and scientific study of disease and its remedy, rather than to spend and be spent in professional bickerings and unseemly jangles, arraying communities for or against their medical purveyors and factions of patrons against each other to the detriment of every one concerned and all their community of interests. No other profession has had such cruel jealousies and such costly strifes. These differencies are being abandoned and must be to make the plan of hospital outlined, a success.

Not more important that this should be accomplished because of a need of harmony and united effort in the profession, but the community must be taught that esteem for their own physician is best shown by a toleration and respect for other workers in the same profession. To know what it means and what it costs to develop a hospital work in a smaller town where a surgical center is of necessity to be newly established, reminds one of McDowell's first ovariotomy at Dansville, Ky., a town then of only 400 inhabitants. But he did credit to his Virginian teacher and stood ready to face the consequences even of a mob if the operation on Mrs. Crawford proved disastrous.

The gratification of better work amply repays for all sacrifices. In our town for the past year no death has occurred from or following a surgical operation in the hospital nor within ten miles or over a territory of 20 miles svuare- It may have been a coincidence, it may be a fact that surgical cases met and embraced an opportunity for earlier intervention and better results.

Within the hospital for eighteen months last past, section incisions and suture punctures have healed without a drop of pus, even with gauze drains. Hence it is possible that country surroundings contribute to ideal surgery. Establishing new centres for hospital work carries with them the corresponding elevation of standards of nursing, and we hope for a class of graduates that will succeed to the places now occupied by the self asserted nurse of necessity whose unselfish work may be praised, but whose efficiency is below our needs. The difficulty and danger of removing patients to distant cities may be noted, but

the procrastination indulged in by patients invites fatal results and it is probable that the larger centers will reap a benefit in better per cent. of recoveries, while the larger experience of workers in the greater centers of medical and surgical thought will always secure their full share of cases. The dissemination of hospitals should advance the whole interests of the profession by placing within easy reach of the people a clean, inviting place, where the best care and safest methods, constantly checked and corrected may be employed to meet the exigencies and direct measures for relief and restoration to health. A large or complex board of managers, comprising persons unacquainted with the problem as a life work, or an establishment with supernumerary assistants to sit on high stools or dawdle away their time, demoralizing the work and increasing the cost, without bettering returns or records; an organization with misguided charitable plans that weaken the moral fibre of the indigent or bid for volunteers to fill the beds, and but little question of finances asked; a staff of servants who believe themselves dictators, who pull wires to keep themselves in place and corral and control and continue after the hospital interim to care, are all nuisances. Direct work with the least machinery possible in management and work, with personal responsibility in every measure or department with the same high nerve tension of the physician and surgeon, who watches the patient seriously disabled or ill, should permeate the hospital with intense purpose and make it a delicate responsive barometer, whose readings will be met.

The hospitals organized under charitable methods have been ably critisized by Harting in his recent retiring address as president of the Buffalo Academy of Medicine. The physician, he says, is imposed upon by this form or hospital. He is a tool, not a manager. He must please the board of control. Free beds are occupied by patients who are able to pay or who are placed there by the influence of large corporations to be paid for by the publice. The physician best appreciates hospital work. Band them together,and make their hospitals their centres of professional interests. Their habits of rivalry may be trusted to correct the mistakes of one another. It does not matter who ows the building or plant. The success of the plant is as dependent on the lesser as the greater stock holder, because in the smaller towns there will never be enough work that any source of material can be alienated with profit to the work. In larger centres, let the physicians' private hospitals conducted on business lines so multiply that their size may not hamper the individual, personal direction of the enterprise.

18 Gorham Street.

Abdominal Suture in a Pig: A Lay Operator.

Dr. H. Hollis writes as follows to the British Medical Journal for August 3d: "A pig about twelve weeks old was six weeks ago gored by a cow in the left flank, making a wound in the skin two inches long, and a small round hole in the muscular wall of the abdomen, through which three or four feet of bowel protruded. Some of the laborers on the farm (the sewage farm) tried to put the intestine back but failed, so called the wife of the manager, who successfully reduced the bowel, closed the muscular wall with an ordinary needle and thread, then put a piece of lard on the wound and sewed the skin up in the same way. The pig was 'dined' on milk and water for a fortnight, and afterward allowed in the yard with the others. Some of the superficial stitches suppurated slightly; now the pig appears to be as well as the others of the same litter. The thread is hanging from the skin, but the wound has healed entirely."—*New York Medical Journal.*

The Practice of Medicine in China.

The Gazette medicale de Paris for August 3d quotes from the penal code of China Section 297, as follows: "When persons who practise medicine or surgery without a competent knowledge thereof, administer drugs or operate with any piercing or cutting instrument in a manner contrary to practice and the established rules, and in consequence cause the death of a patient, the magistrates shall summon other men of skill to examine into the nature of the remedy which has been given, or that of the wound that has been inflicted, which has been followed by such death of a patient. If it is found that only an error can be charged, without any desire to do injury, the physician or surgeon may obtain relief from the penalties inflicted for homicide in the manner laid down in cases of accidental killing; but the accused shall be debarred forever from again engaging in the practice of his procession.—*New York Medical Journal.*

A foreign physician asserts that the pain of neuralgia, if superficial, can be relieved by throwing a beam from a bright arc light upon the affected part.

THE

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SMALLPOX PROSPECTIVELY.

When we look with some penetration into the rays cast by the medical press of the United States for data and statistics regarding smallpox during the past ten months; when we consider the various sections, where exist foci, remaining through the carelessness on the part of some one, or the positive refusal on the part of others to carry out complete sanitary measures for the destruction of the germs, we will fully recognize that we have the inevitable prospect of a more or less widespread epidemic of that loathsome disease prevailing during the coming winter months; spreading generally over the United States, besides, quite possibly, appearing in a more malignant form than that which characterized the outbreak of the past winter.

The history of the past winter gave a record of 20,000 to 30,000 cases in the United States. In American Medicine for May 18, 1901, was published a table showing 22,344 cases which occurred from December 28, 1900, to May 3, 1901, with a mortality of 349.

Many cases had occurred before and many were added after the latter date.

With a more general and pronounced epidemic occurring, the important query with every person is, naturally, who will be a victim and how many may prove unable to baffle with the disease.

How large the mortality may be, remains to be seen. This condition promises to prevail unless the proper measures are carried out in every section to check this disease before it has the opportunity to extend its effect. The entire profession should give this subject the most earnest consideration; aggressive measures should be inaugurated throughout the country to put every section in the best condition to prevent its development. Every medical man should be on the alert to detect the earliest appearance of the disease and promptly adopt every quarantine regulation necessary to prevent an increase or extention of the disease. Let every State, county and municipal board of health enforce proper sanitary regulations, and do everything necessary to prevent the spread of the disease and exposure of innocent individuals. Let vaccination be vigorously prosecuted by all boards of health and school board when such are vested in power to put in action this important measure.

In the Journal of the American Medical Association for August 24, 1901, page 524, Dr. M. L. Hughes, of Clarksville, Tenn., ends a communication on the smallpox epidemic as follows: "We take good care of our cases and if the State would exercise measures as rigid, the disease would be much more readily controlled. The 'three ates,' vaccinate, isolate and fumigate, should put an end to the disease."

SUBSTITUTION—ITS EVILS AND REMEDY.

One of the most desired results to a physician in his daily professional work is to be successful in whatever he undertakes.

One of the most comforting conditions prevail when he is able to discern the benefit which result from those efforts that he has used to attain a condition, which he desires in the progress of his patient toward renewed health and normal condition. This is a condition especialy to be desired, as it gives renewed life, lessons physical suffering and enables the patient to again be useful and comfortable. "To cure or relieve kindly, safely and promptly as it is possible," is an old medical maxim.

To be most successful at any undertaking in this life by whatever human efforts, the workman needs the most perfect and reliable implements which is used and to which he is familiar in the action and use. If he has faulty tools or implements with which he is not well acquainted or accustomed to, he cannot attain that proficiency of result, as if it were otherwise. Therefore one of the most essential matters to the physician in his treatment of all cases is to have the prescribed article furnished the patient without any alteration or substitution whatever.

The physician only has had the contact and made the careful study of the case and he only is the one who recognizes the conditions and the indicated aids which he deems necessary or useful to gain a definite result; No one can suggest or cause a change in that measure without making iminent a risk toward thwarting the object

of the prescriber, because no one is in possession of knowledge, by preparation or otherwise, which will enable them to judge the care as the one who prescribed, such undoing would assuredly be unjust to the physician and patient alike.

That such liberties are taken by druggists in compounding or filling prescriptions at times is well known.

Some physicians provided in their office a line of drugs and preparations which they use and thus make sure that their patients get what they wish them to have. This is an excelent plan when it is feasible, but in a large exacting practice this adds much labor, and with some it is impossible for want of time in making up preparations.

In every city or town there are pharmacists or druggists who can be fully depended upon. In fact most druggists if they are aware that a physician is positive in having his prescriptions filled as he directs, will adhere to that policy. Let every physician scrutinize the medicine and measures directed for the use of his patient and demand that the article be as he knows it ought to be: If a druggist cannot supply an article which has been prescribed let him procure the article or decline to furnish it. In this way the physician will be served with what he has asked for and his labor of years of fitting himself for his work and that of studying the case will not be set aside by the whim of some one who is not burdened with the responsibility.

MEDICAL EDUCATION IN CHINA.

The following editoral from the Philadelphia Medical Journal is a true statement as far as it goes of the Medicine and Surgery in China. Dr. Whitney is a medical Missionary living in Tokio, Japan. He is one of th most skillful and conscientious men I ever met. The editorial say:

It is difficult for us in the midst of our great Western civilization to appreciate the fact that an immense empire like China, with an ancient and in some respects highly developed civilization of its own, is practically without hospitals, medical colleges or any system of practice approaching a true science of medicine. In a recent number of the China Medical Missionary Journal, Dr. H. T. Whitney described briefly the situation in China and its needs. He says that there are no Chinese hospitals, no Chinese medical colleges, no Chinese physicians proper, and no Chinese medical science. It evidently remains for the pioneers of Western civilization to introduce this science with all its necessary appurtenances into the Celestial Empire. This is a vast but most interesting problem. Dr. Whitney thinks he has never seen more opportune time than the present for extending the medical work already done. The Boxer movement of last year was but a temporary hindrance. Thus far the pioneers of Western medicine have been largely the missionaries. They have seized the opportunity to make medicine the hand-maiden of religion, and it is doubtless true that they have done some good in this way. But what Dr. Whitney, with wise forethought, preceives and emphasizes, is that China must have her own medical colleges and schools as well as her own scientific medicine. The Japanese have already taken great strides in this direction, and some of their medical scientists have contributed substantially to medical knowledge. In China, on the contrary, everything remains to be done. The few missionary schools and hospitals are thus far mere nuclei. They are in every sense exotic, and while doubtless they are and will continue to be the centres of medical science, they cannot be said to have taken root until they have interested the Chinese people and government in this problem of medical education. In other words, the natives themselves must be trained and educated as physicians; the hospitals and medical schools must be essentially Chinese, although doubtless they will require to be under Western tutelage for some years to come.

We are glad to note that there is a plan for the establishment of a native medical college in Nanking or Hankow. We consider this whole subject of transcendent interest and importance. When we consider the vast population of China and its needs, no words are wanted to paint the extent of the field and its importance for future cultivation. We extend to this movement our hearty congratulations.

In this connection we might say that we believe that while much is owing to the missionaries for the introduction of medicine into China. it is nevertheless better that medical science should take such a root in that country that in a sense it will propagate itself. In other words, we believe it should be secularized, as it is in all civilized countries. While the conditions in China have evidently been such as to require the propaganda of the missionaries in order to introduce medical science into that country , it will nevertheless be better in the end, and more wholesome, for the more advanced and educated Chinese to see for themselves that medicine is to be cultivated for itself.

CORRECT THE GASTRIC LESION.

The question often arises, do we as physicians appreciate as we should the importance of bringing the condition of the stomach and intestinal canal to as nearly a normal condition as possible in the treatment of acute and chronic diseases before any other treatment is instituted?

It is undeniable that without a correction of the gastric lesion in any pathological condition we cannot hope for success in one treatment, in fact the prognosis is grave when our efforts fail to correct this lesion. As it is the physician's mission to cure, our aim should be to, at all times and under all circumstances, use our best efforts in this direction. No matter under what nosological classification our disease condition may come, let us strive to place the stomach in such a condition that not only the medicine will act but the food be digested also.

The secret of cureing many pathological conditions rests upon the ability of the prescriber to increase the powers of nutrition. The celebrated Osler claims this to be the true method of curing tuberculosis. It is the desire of all truly scientific physicians to assist nature—not to interfere with it, but to assist in every way possible. If this be true, how essential it is that we be well versed in disease manifestations and drug action, so as to correct the former by the latter. When the pure and unadulterated drug is prescribed according to its clean-cut indications we are in the great majority of cases rewarded by seeing the desired result accomplished, and can well feel proud that the days of shot-gun medication are past, where great quantities of medicine were administered through ignorance that simply disturbed the stomach and interfered with nature in her efforts to overcome the difficulty.

He who doubts this statement need but consult past history in order to discover that good nursing, a pure food, without medicine, cured more cases of typhoid fever, pneumonia, etc., than the old-fashioned method of treating names instead of conditions did. No wonder the pendulum swung to the other extreme and the profession developed so many therapeutic nihilists—so let us be reasonable and not go to the extreme. There is a power in medicine, but he who uses it must understand its action and know the true indications for its use. Take the drug nux vomica, when indicated it has no equal. The broad, flabby tongue which shows the imprints of the teeth, giving the impression as if it was too large for the mouth, is one of the sure indications for nux vomica, and when we investigate we discover that this peculiar tongue, as a rule, speaks to us of atony of the gastro-intestinal canal. Do you know of a better drug for this condition? And so we could go on through the list of some of the old reliables, but space will not permit.

The close observer does not overlook the smaller things, he endeavors to take advantage of every opportunity and in this way he becomes accomplished. I am not one who would deprecate scientific research—far from it—but I do enter a protest against individuals "running wild" over laboratory research at the expense of the old tried and true clinical and therapeutic methods that were so successful in the hands of our fathers.

There are many drugs in our materia medica that should be re-studied and their indications dwelled upon for the simple reason that by so doing we would all become more successful in our active practice. Let the theorist give way to the practical physician so that American medicine can be perpetuated.

PROPHYLAXIS IN SKIN DISEASES.

It is a trite observation that where one organ of the body is deranged in function, other organs will act vicariously. When the septic materials of the alimentary tract, the excrementitious products, are allowed by constipation to be re-absorbed into the blood, the whole system becomes poisoned. The liver, kidneys, and skin, attempt, by vicarious action, to eliminate the toxines. In consequence, those organs are overwrought. The blood, too, tries to throw off the imperfectly oxidized materials, which it has taken up, by osmosis, from the intercellular spaces, and the lymph channels into various organs—notably the skin. Here begins, invariably, some cutaneous lesion.

The Vienna School of Dermatologists, insists too strenuously upon topical applications. Internal medication must not be neglected, and too much stress can not be laid upon prophylaxis.

Dr. W. R. Inge Dalton, of New York City, struck a key-note, which has attracted universal recognition, (his paper read at Atlantic City, June, 1900,) when he announced the theory, "that the chyme, passing in a hyper-acid condition from the stomach, through the pylorus, into the duodenum, entails such increased labor upon it, that its contents can not be rendered sufficiently alkaline for physiologic metabolism;" and his conclusion is, that "the chyle is emulsified, while undergoing pancreatic digestion, and these minutely divided products transport the pathogenic germs

immediately through the lacteals, without causing infection, locally, into the vena-cava; the lymph of the lymphatic system, with the micro-organism, enveloped in the chyle, goes directly through the thoracic duct into the left innominate vein into the venous circulation, through the right heart to the lungs, setting up infection there by retarding oxidation, or they pass on with the blood to find access to the cutaneous system, where, if they find suitable culture-media (the nidus upon which they feed) their deleterious action commences, leading to an aberrant cellular activity, caused by changes in contiguous surrounding fluids, unless the phagocytes succeed in devouring them." Hence, we conclude that thorough antisepsis of the whole digestive tract should be vigorously adhered to and proper diet enjoined. Dalton uses naphthalin, charcoal and specæ (vide "Journal," March 30th ult.) By these means we can lessen and often obviate the virulent activities by altering the environments of the pathogenic organisms.

GALL-STONES.

The subject of gall-stones has elicited much thought and investigation during the past ten or fifteen years, Its comparative ferquency has provoked the attention of the medical mind throughout the world and many investigators have been studying the condition with respect to its cause and frequency.

One of the most noted and important articles which has appeared upon this subject was recently read before the Johns Hopkins Medical Society, entitled "The Frequency of Gall-Stones in the United States" by Clelia Duel Mosher, A.M; M. D. The article was printed in abstract form in the Bulletin of the Johns Hopkins Hospital and will be published in full in Vol. X of the "Report" of the Hospital.

Dr. Mosher examined the records of 1555 autopsies from the Pathological Department of Johns Hopkins Hospital. "Of the 1655 records examined, 1037 were males, 618 females, 1018 white, 654 blacks. Gall-stones were found in 115 cases or 6.94 per cent. of the whole number. Of 232 autopsies under twenty years of age, one case or .43 per cent. had had gall-stones. Of the ages twenty-one to thirty years, 277 autopsies, five cases of gall-stone, 1.80 per cent; thirty-one to forty years, 333 autopsies, with 18 cases of gall-stone, 5.40 per cent; forty-one to fifty years, 328 autopsies, 29 8. 84 per cent. with gall-stones; fifty-one to sixty years, 258 autopsies, there were 34 cases with gall-stone, 13.14 per cent; sixty-one years and over, 219 autopsies, there were 28 cases with gall-stone, 12.17 per cent.

The frequency of the occurrence of gall-stone in the Uuited States compared with that of Germany shows a marked difference. An examination of 1150 autopies by Shroder there were 141 cases with gall-stone or .12 per cent. as compared with 6.94 per cent. which were found in the autopsies by Mosher.

In the United States the greatest percentage of cases with gall-stones were found in the cases aged from fifty-one to sixty, 13. 14 per cent. while in Germany the greatest number occurred after sixty years of age, .25 per cent. In the United States gall-stones are rare before the thirtieth year.

Of the 618 females 58 cases or 9.37 per cent. had gall-stones, while 57 males or 5.39 per cent. had gall-stones. In Germany, Shroder's statistics give 20.6 per cent. or one in every five women have gall-stone, while in the United States one in every ten or eleven appear to be affected by gall-stones, rather less than half that of Germany women.

There were 5.49 per cent of men found with gall-stones in the United States as compared with 4.4 per cent. of men in Germany so affected. In comparing the whites with the blacks, there were 80 whites or 7.85 per cent. and 35 cases or 5.51 per cent. of the negroes with gall-stones.

Examinations were made of autopsies at Bay View and the Alms House Baltimore, Md. ascertains the difference, if any, infrequency of gall-stones in the very poor. Of the very 125 autopsies examined at the asylum and alms house 16 cases or 12.8 per cent. had gall-stones, as compared with 6.94 per cent. for all cases examined. This greater frequency however may be partially explained by the greater number over thirty years of age in the alms house and asylum autopsies.

"In the 115 cases in which gall-stone were found, death was atributed to 13 cases only. In the remaining 102 cases the gall-stones were incidental".

When it is recognized that the occurrence of gall-stone cases is as high as 13.14 per cent. in advanced age, it becomes a subject worthy of the consideration of the profession. Various authors believe that gall-stones are an exciting cause in hepatic carcinoma and malignancy in the duct.

A. J. Ochsner, M. D. Chicago, in an article (Philadelphia Medical Journal, October 6, 1900) says: "That it is frequently difficult to make a differential diagnosis

between gall-stones and appendicitis, has been pointed out by many of the most experienced authors."

When the appendix is found in a normal condition or but slightly diseased, the liver and gall-bladder should be carefully examined for gall-stones or billiary concretions.

The late Hunter Maguire, in Virginia Medical Semi-Monthly, Nov. 24, 1899. (Philadelphia Medical Journal) reports two cases where gall-stones were found when he had made an operation for supposed appendicitis.

A NEW BREAST PUMP.

One of the possible abnormal conditions which may occur in the lying-in room, and gives the attending physician anxious moments is mammary congestion or mastitis. To prevent this condition is a very desirable consideration.

One of the fruitful sources of this condition is the inability or failure of the child to empty the engorged lacteal glands, also in case of still birth or death of the child. Or from whatever cause engorgement is allowed to continue, there will result congestion and suppuration.

To overcome any threatened engorgement, gentle friction and massage over the part of the breast affected is the first procedure, this then to be followed by the use of a breast pump to withdraw the accumulated milk, thus relieve the glands of the burden and give comfort to the patient.

One of the most recent and excellent devices is the Trahlactor, a breast pump devised by W. H. Martin of Broadway, New York, and manufactured by the Goodyear Rubber Company. It may be obtained of all drug and instrument houses. An advertisement of which appears in the advertising pages of this Journal. This pump is one of the most rational that has yet been devised for the purpose. The construction and action is such that no undue friction or pressure occurs about the breast, this is an exceedingly important matter. The receptacle being connected by rubber tubes the instrument may be used when the woman is in most any comfortable position. The ability to take the instrument apart enables the nurse to keep it thoroughly clean.

The simplicity of its construction and action is a very great gain toward its usefulness.

A very important condition to which the pump may be used is when the mothers nipple is so small or sunken that the child cannot grasp it. The Trahlactor may be used for a few moments when the instrument is removed the child will then be able to grasp the nipple, and from the application of the pump, the milk flow being started, the child will thus be encouraged to continue its work.

An instrument to be devised and brought out by the Goodyear Rubber Co. must be such that will meet with the approval of the profession, and by its construction, be adapted to the work for which it is intended.

This itself is strong proof of its superiority over any other breast pump in the market.

MEDICINE IN ALBANY NEW YORK.

The Capitol of the Empire State is attracting to itself no little importance as a local Surgical and Medical centre.

The days have long since past when the distinguished in abdomina surgery could be found in less than half a dozen centres, making it necessary for the sufferer to continue a life or misery and pass away with no opportunity to consult the best surgical or medical skill, if not able to travel in some instances half across the union. Now thanks to the world's teachers and to the taught, many local centres have grown, distributed among this mass of suffering humanity, in comparatively few years.

Albany, the capitol of New York State, but three or four hours travel from New York City, one of the world's great medical and surgical centres, after years of honest effort has won for itself no little importance as a local medical and surgical centre. The untireing efforts and unassuming skill of Dr. Albert Veanderveer has won for him prominence among the leading surgeons of America. Drs. Ward and Henry Hun, enjoy more than a local reputation and their contributions to the field of medicine have been noted throughout the states.

In June 1899, a new Hospital was erected in the western part of the city, with modern surgical appliances surpassed by none. In addition to a beautiful large operating amphitheatre, there are four private operating rooms, two of which are reserved for aseptic and abdominal surgery only, and are kept clean by a regular system of fumigation with Formaldehyde. The public and private wards, private rooms with the maternity, child's and isolation wards, nurse home, dispensaries embracing all the branches of medicine, surgery and the specialties, with the laundry, extensive kitchens and boiler room, and a seperate building for the temporary detention of insane patients about to be committed to state or other institutions, make a collec-

tion of buildings under one roof of which not only Albany, but the State should be proud.

The Albany Medical College was established in 1839 and has ever striven to better its instuction and raise its standards and for several years has offered to its students a regular four year graded course of study with abundant clinical materal furnished by the various hospitals of the city.

During the summer, a public clinic has been held in the amphitheatre of the new Albany Hospital, in Surgery, Medicine and Bacteriology, which has attracted no little local attention. These are known as "Clinic Days" and are occupied from 9 a.m. to 4.30 p. m. with an hour recess for luncheon. Thursday is clinic day. The course was opened July 2, with an introductory address by Dr. Albert Vanderveer, Dean of the college, and Prof of Abdominal Surgery. Every effort has been put forth to make this course thoroughly practical for the practitinoer of medicine. The morning Surgical Clinics have been conducted by Drs- Vanderveer and W. G. Mac Donald. Bacteriology has been studied in the new Bender Laboratory across the green from the new hospital.

The esteem of this course in the minds of those attending, speaks for itself when we consider that the busy practitioner makes it convenient to leave home and patients for whole day every week. The course closed on the last Tuesday of August with an explination and inspection of the filter plant of Albany. This filter plant, through which Albany's water supply has been greatly improved, is the most complete in *world* and the United States. It has been in operation for two years. Compareing the death rate of the city during the first year of operating the filter beds, with the average death rate for the previous ten years, it has been shown that there were 50 less deaths from all diarrheal diseases, 444 less deaths from all diseases, 39 cases of death from typhoid fever as against 90 in favor of the first year of filtered water.

The albany College of Pharmacy incorporated in 1881 and the Training School for nurses incorporated in 1897, with the Medical Library in the State Capital, free, and accessible to all, contrbute their part toward making Albany a future medical centre.

The bill giving the New York State Board of Health power to regulate the type and leading of books, newspapers, and serial literature, to protect the public eyesight, has been reported favorably by the Public Health Committee of the Assembly.

BOOK REVIEWS.

Transactions of the Vermont State Medical Society, 1900. Published by the Society. D. C. Hawley, M.D., Sec'y.

These transactions come to us with great regularity, and we are always glad to get them. The reports of the different committees are clearly given and are very complete. The President's address upon "Localization of the Lesion in Paralysis," by M. R. Crain, is short, concise and interesting.

Papers by Geo. H. Graham, S. E. Darling, A. P. Grinnell and others are well selected and carefully prepared.

Obituaries of Lyman Rogers, E. F. Uphom, E. H. Pettingill, and C. M. Terrill, close the volume.

Transactions of the Medical Association of Georgia. Fifty-second Annual Session, 1900.

This is not only a handsome volume of 524 pages, but it contains many articles of value by men eminent, both in medical and surgical practice, among whom may be mentioned, J Collins Warren, Chas. A. L. Reed; Robt. L. Morris; George Ryerson Fowler, and others. D. Henry L. Elsner of Syracuse, is President, and Frederick C. Curtis of Albany is Secretary.

Transactions of the Medical Society of the State of New York for the year 1901. Published by the Society.

This is quite an old organization and one where much interest is manifested, and as a result of such a meeting much good benefit is discussed. The minutes are well taken, the papers are of a very high order, and very numerous. The membership of this body is large. James B. Baird is President and Louis Jones of Atlanta, Secretary and Treasurer.

The Golden Tooth. By J. Maclaren Cobban, F. M. Bucklers & Co., New York.

This novel of 305 pages is filled with interest. It will give pleasure to those who read it. The style is clear and from beginning to end, many thrilling scenes are enacted. The printing fairly good, and binding and paper good.

LITERARY NOTES.

Scribner's Magazine for October has an attractive colored cover by Walter Appleton Clark—the first design of this kind that he has made. The number is also rich in illustrations by such accomplished artists as

Howard Pyle, F. C. Yohn, Henry Hutt, W. R. Leigh, and Louise L. Heustis.

Theodore Roosevelt contributes the first of two hunting articles in that spirited articles in that spirited manner which makes "The Wilderness Hunter" one of the best outdoor books ever written. These articles, called "With the Cougar Hounds," describe his adventures while hunting the mountain lion last winter in Colorado. The pack of intelligent hounds who chase the prey are the heroes of the story in which the individuality of the dogs is delightfully portrayed by Col. Roosevelt. He also in his first article has gathered many new facts and inferences in regard to the nature of the cougar which is much in dispute. The article is therefore a contribution to natural history. The illustrations are from a collection by Col. Roosevelt's companion in the hunt, Philip K. Stewart, who succeeded in taking cougar and wild cats near at hand in the trees, with the dogs climbing after them; also the death tussle with the hound.

General Francis V. Greene's second article on the Regular Army covers the period from the War of 1812 to the Civil War. The most stirring events in this chapter are of course the Battle of New Orleans, the War with the Creeks, the Mexican War,and the Mormon Expedition. Three eminent military artists illustrate this paper—Howard Pyle, R. F. Zogbaum, and F. C. Yohn.

The early Autumn is the season of County fairs and E. S. Nadal, a well-known writer as well as an expert horseman, has caught the spirit and also the poetry of these picturesque American celebrations in "A Horse-Fair Pilgrimage." He describes the trotters and pacers at work, and also the charateristics of the crowd who exhibit them. He has given a fine literary quality to the scene. A series of beautiful drawings has been made by Leigh and Deman Fink.

Walter A. Wyckoff, author of "The Workers," concludes his present series with an account of his experiences in the Chicago slums, giving particularly several police court incidents.

"Thomas Carlyle" is the subject of W. C. Brownell's essay—certainly the most mature and convincing of this remarkable group of critical essays which one authority says "have restored criticism to a new dignity."

There are three short love stories—"Over Sunday," by Carolyn Wells, solves a most amusing situation; "Oscar and Louise," is the love story of a Danish overseer and a French maid, told with charming humor by Margaret Sutton Brisco and illustrated by Louise L. Heustis; 'sA Triumph's Evidence" is a story of love and politics in the Middle West by William Allen White, editor of the Emporia (Kansas) Gazette. Mr. White is a politician as well as a vigorous writer, and this story depicts a race for a United States Senatorship in a most vivid manner.

Mr. Mitchell's romantic serial, "The Pines of Lory," continues to be a most charming bit of fiction, full of humor and sentiment. It will be concluded in November.

Several illustrated poems; a discussion of the sculpture of Bartholome and "The Point of View" conclude the number.

The October "New" Lippincott.—The Complete Novel published in October strikes a different key from those recently presented by Lippincott. Notwithstanding the title, "The Anvil," is "Frenchy." The author is is R. V. Risley, of New York, a writer, who excels in picturing the human emotions. A German philosopher, like Faust of old, is captured by a vision in a garden. His courting begins over the wall standing on a wheel-barrow, but it soon develops into most impassioned and unusual situations, which are so well told by Mr. Risley that the tale lives inevitably in the memory.

Though summer is over, supposedly the fiction season, the store of Lippincott's good stories is not diminished this month. Robert Herrick's "Polity of Nature" is an exceptionally brilliant tale of modern society. Caroline Lockhart (Suzette) contributes a lively incident of a "get-rich-quick" scheme called "In on the Ground Floor." "The Friendship," by Louis Zangwill, is a delightful story of loyalty, though it does not settle the vexed question of comradeship between the sexes, as this alliance is of the Damon and Phythias sort.

Paul Laurence Dunbar's name stands in the contents for both prose and verse. His story, "The White Counterpane,"—continuing the series of Ohio pastorals—deals with rural lovers in Ohio of the kind the author depicts to the life. They have waited ten years for a mother to "come round" and give her blessing, and in the end their patients is rewarded.

A striking but brief sketch by Francis Churchill Williams, author of "J. Delvin, Boss," is called "Petter and Number Six." This is one of the characteristic tales of a steel furnace.

Austin Dobson knows the eighteenth century as do but few people; therefore his

paper on the "Titled Authors of the Eighteenth Century" is most valuable. It is both graceful and forcibly written.

Eben E. Rexford's practical article on "Bulbs: How to Grow Them in Garden and House," will be eagerly sought by those who want early spring and winter flowers. His advice covers details which by the books are oftener left to the imagination.

"Petticoat Politics," by Anne Hollingsworth Wharton, is a gossipy paper about Washington City during President Jackson's administration. It is interesting to note feminine influence in politics at that period.

In addition to Paul Laurence Dunbar's quatrain, called "To a Captious Critic," there appear the poems, "D'Italia," by Clinton Scollard; "The Olden Songs," by Clarence Urmy; "My New Foe," by Felix N. Gerson; "Unhappiness," by Charles Hanson Towne, and "The Endless Race," by Frances du Bignon.

The "Walnuts and Wine" Department is full of good things, humorous, touching, and useful

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"William McKinley" is appropriately the subject of the leading article in the October Forum. It is a brilliant character sketch by Henry Litchfield West, whose work as a leading journalist at Washington brought him frequenily into contact with the deceased President. Representative Henry Sherman Boutell contradicts an instructive and interesting account of "Our National Debt; its Origin, History, and Peculiarieties." Mr. A. Maurice Low discusses the relation of "Labor and the Law in England," with special reference to the significant decision of the House of Lords in a recent case. Dr. P. M. Foshay pleads for public support to the movement for "The Organization of the Medical Profession." An account of "The Colonization of Siberia," by R. E. C. Long, is followed by a forecast of "The South Africa of To-Morrow," by Albert G. Robinson. "The Outlook for Public Ownership" is dealt with by Albert Watkins, who summarises the experience of foreign countries in such matters as government railroads, etc. Prof. David Kinley gives an estimate of "European Feeling towards the United States." "The Decadence of Our Constitution" is the title of a critical article by Prof. Darius H. Pingrey. Mr. E. Friend describes the history and operations of "The Paris Bourse." Mr. Herbert W. Horwill utters a warning against "The Monastic Danger in Higher Education."

President McKinley's assassination and Mr. Roosevelt's accession to the Presidency are the two dominant topics in the October Review of Reviews. Aside from the editorial treatment of those momentous events, a fully illustrated account of the last days of President McKinley is contributed by Mr. Walter Wellman, the accomplished newspaper correspondent, who was himself at Buffalo and writes from personal, first hand knowledge of all the details of the tragedy. Mr. Wellman's comprehensive article is followed by a brief characterization of our great trio of martyr Presidents, from the pen of Commissioner H. B. B. Macfarland, of the District of Columbia; there is also an article on President Roosevelt, with portraits of Mr. and Mrs. Roosevelt and the six Roosevelt children. The Review presents the full text of Mr. McKinley's Buffalo speech, made on the day before the shooting, and of Mr. Roosevelt's Minneapolis address of September 2.

Little is thought and less is known by the average man concerning the lives and aims of the 40,000 men and boys who delve under the surface of the earth in places of darkness and danger, where hardly a day goes by without recording the death by falls of rock, coal or slate or more than one unfortunate miner. An article on this subject at once impartial and vitally interesting is contributed to The Cosmopolitan for October by John Mitchell, President of the United Mine Workers of America, whom every one recalls as the man who organized the miners and carried through to a successful termination the great anthracite strike of 1900.

ABSTRACTS of the Leading Articles of the Month.

A Study of the Temperature, Pulse and Respiration in the Diagnosis and Prognosis of Certain Diseases of the Brain.

In a most excellent and instructive paper by J. L. Eskridge, in the N. Y. Medical Journal, the following timely conclusions are offered:

1. By a careful study of the temperature, pulse, and respiration much valuable information that will aid us in the diagnosis and prognosis in certain diseases of the brain can be obtained.

2. Much care must be exercised and considerable time and patience are required on the part of the physician in obtaining reliable records.

3. Nurses are totally incompetent for such detailed work, unless they have been specially drilled for it.

4. A change in the character of the respiration, rather than in its frequency, is sometimes one of the first positive symptoms of organic intracranial disease, especially of tuberculous meningitis.

5. A respiration that is more frequent while the patient is asleep or unconscious than it is during the waking or conscious moments is very strong evidence of organic disease of the brain so situated as to interfere with the respiratory centres.

6. Apoplexy due to hemorrhage is attended with greater disturbance of the temperature of the body soon after the occurrence of the stroke than is the case when the apoplexy is due to thrombus or embolus. The temperature disturbances in apoplexy due to hemorrhage, especially if attended with hemiplegia, are a slight fall of the axillary heat within an hour or less after the occurrence of the hemorrhage, the fall being a little greater on the paralyzed side; after reaction has occurred (eight to twelve hours on the average) a slight rise of temperature, a little greater on the paralyzed than on the opposite side; an elevation of temperature from half to 2 deg. or 3 deg. above normal for the next few days, the temperature remaining a little higher on the paralyzed than on the unaffected side for a week or more (in cases of complete hemiplegia); later, the temperature slightly lower on the paralyzed side if trophic disturbances occur.

7. In apoplexy from thrombus or embolus there is scarcely an appreciable disturbance of temperature before the end of the second day, except in the severer cases. In these cases it is slight. In the majority of cases of apoplexy from thrombi or emboli there is no marked variation of temperature from the normal at any time, so that disturbance of the temperature the first day points very strongly to hemorrhage as the cause.

8. Considerable disturbance of temperature beginning from the second to the fourth day, is significant of thrombus or embolus, and indicates extensive softening and an unfavorable prognosis.

9. If the temperature on the paralyzed side remains higher than on the opposite side several weeks after the occurrence of the apoplexy from any cause, it indicates that softening or inflammation of the brain is going on, and lends great gravity to the prognosis.

10. It is premature to attempt to arrive at any definite conclusions from a study of the temperature, pulse, and respiration in traumatism of the brain. This class of cases, on account of their great importance, deserves a more detailed study of all their symptoms. It is probable that, if cases of traumatism of the brain were classified and grouped according to the severity of the injuries and the character of the symptoms, a careful comparison of the temperature, pulse, and respiration would lead to important conclusions.

In regard to the traumatic class of cases it seems that we are justified in making the following tentative statements.

a. All cases of injuries to the head in which the temperature does not reach normal or slightly above a few hours after the receipt of the traumata will probably prove rapidly fatal. The higher the temperature, the greater the probability is that contusion or laceration of the brain and membranes is a more important factor in the case than intracranial hemorrhage. The greater the variation of the temperature from normal, either above or below, the worse the prognosis.

b. A rapid, weak, and intermittent or irregular pulse denoted great danger. A pulse that is at first slow, but soon after becomes quite rapid, indicates that brain power is being overwhelmed by the intracranial lesion, and justifies a bad prognosis.

c. An exceedingly slow (8 or 10 to the minute) and intermittent respiration indicates a lesion at the base, in the posterior fossa. The slower and the more pronounced the intermission of the respiration, the greater is the danger of sudden death. A respiration at first nearly normal in frequency, but soon after becoming quite rapid, indicates a rapidly fatal case.

A Study of the Temperature Laws in Epilepsy Based on One Thousand Observations.

According to the Medical News, Bourneville, editor of the Archives neurology, physician to the Bicetre Hospital, Paris, desciple of Charcot, and editor of the complete works of the latter, seems to have been both the earliest and the most voluminous writer on the above subject. His studies date from the year 1869 to the present decade. Williams P. Spratting, in a timely and lengthy article in the Medical News concludes as follows:

1. In his conclusions Bourneville says: Isolated attacks of epilepsy augment the central temperature. The only logical inference we can draw from this statement is that Bournville found the temperature increased after every isolated epileptic seizure and nothing exists in Bourneville's work on the subject to change this opinion.

2. The results of our own observations agree in part only with those of Bourne-

ville, the latter's work having in our opinion, lost much of its value through failure to properly classify the types of seizures studied and to make due allowance for certain physiological differences in temperature.

3. After making due allowance for diurnal variation, we find that 40 per cent. would be the lowest of such cases showing increased temperature after seizures, and 70 per cent. the highest, making the general grand average of cases of all types showing increased temperature after seizures 55 per cent., the difference in the results obtained by Bournevillee and by us being 45 per cent. The views of such eminent physiologists as Dalton, Kirk, Foster, Landois and Sterling, relative to the part played by muscular activity of the muscular system in certain cases of major epilepsy have great weight in determining the cause of heat production in these cases, wholly irrespective of any influence that might be exerted by the heat centers in the brain.

4. By the results of our own observations we are led to believe that in many petit mal and psychic attacks in which muscular activity plays so small a part, and in which the temperature is often increased after seizures, such increase is due to a disturbance either of the heat centre that is thought to exist in the cortex of the brain, or of the center or centers that observers believe have been located in the corpus stratum an optic thalamus.

5. We find that subnormal temperatures follow epileptic seizures in greater proportion after grand mal than after petit mal or psychic seizures, the proportion being 15 per cent. of the former to 10 per cent. of the latter types; and that while we agree in the main with Lemoine as to the cause for such low temperatures, when he says "Certain cases are naturally anomalous in the matter of temperature, having abnormally low temperatures in health," we do not believe that this explanation is altogether sufficient, but that there will usually be found to exist in these cases some chronic disease or general asthenic consideration of long standing that lowers the stamina and vitality of the individual.

6. All that has been said by Bourneville, Lemoine and others, relative to the high temperature in status epilepticus, confirmed by the tabulated results in the 17 cases referred to in this paper.

7. The temperature in serial attacks runs uniformly higher than in isolated attacks, but not so high as in status, serial attacks occupying midway ground, as to frequency, severity, temperature elevations and mortality, between isolated seizures and status epilepticus.

8. As a possible factor in establishing the presence of toxins or other agencies in the body prior to and possibly causing the convulsions, and effort was made to take the temperature in some cases when the aura was sufficient length, before the attack; but it was done in one case only, and in this the heat, beginning two hours before the fit, ran steadily up to 102 deg. F., when the patient passed into convulsion.

A Frequent Pulse as the Disease Advances.

Much interest attaches itself to the pulse beat. A careful study of the pulse, a familiarity with its variations will often be a good index as to diagnosis and prognosis of diseases. In meningitis says J. L. Eskridge, in the N. Y. Medical Journal, the pulse gets slower as soon as exudation within the cranial cavity takes place. A continued frequent pulse indicates a rapidly fatal case. The pulse almost invariably becomes rapid before death, and the more frequent the pulse, other things being equal, the sooner the end will be reached. After the shock is over in apoplexy, whether the "stroke" has been due to hemorrhage, thrombus, or embolus, a rapid pulse lends gravity to the prognosis. A continued frequent pulse in traumatism of the brain, be the lesion hemorrhage, compression, or inflammation, or all combined, warrants, in the majority of instances, a cautious or bad prognosis. In all cases of death from a brain lesion, dissolution, if it takes place in the usual manner, is preceded by a frequent pulse. A careful study of the pulse in connection with the temperature and respiration will enable one often to indicate approximately the time when death will take place. We have all watched cases of brain disease in which the pulse, temperature, and respiration indicated a speedy termination, and we have felt inclined to tell the patient's friends that death would probably take place within twelve or twenty-four hours, but our experience has taught us to be more cautious. We have said "without a change for the better, death will probably occur within twelve or twenty-four hours." I have seen a few such patients recover, and others linger several days. We must remember that symptoms indicating a speedy dissolution may be due to temporarily acting causes, such as a distended bowel, inactivity of the kidneys, insufficient food, or insufficient supporting treatment. Did we know the exact pathological lesions within the cranium, we could not measure the vitality

and resisting power of each individual. Any irregularity or intermittent character that a rapid pulse may have gives increased gravity to the case.

Atrophic Rhinitis.

From a careful clinical study of this disease Carl Seiler, in the N. Y. Medical Journal, is of the opinion that Atrophic Rhinitis is comparatively a rare disease. averaging about fifteen to one thousand of the other forms of nasal catarrh. There is also a marked difference in the frequency of the occurrence of the disease in different nationalities and races. Another point of interest is the occupation of parents had no significant influence upon the causation of the disease, except in those rare cases which presented themselves in employees of chemical manufacturing establishments.

Another observation he mentions was that not infrequently persons presented themselves who were afflicted with unilateral atrophic rhinitis, and in one or the other of the nasal chambers presented the well-known characteristic features of the disease, and were even to a greater or less extent afflicted with that prominent and disagreeable symptom ozæna. In regard to treating this disease he says, after trying all the douches and sprays recommended in literature and finding them all useless, he came to the conclusion that the proper and effective treatment for atrophic rhinitis consisted, first, in the removal of the dried secretions of the mucous membrane in the nose, not by forcible removal with instruments or a stream of water under high pressure, as from the nasal douche or the post-nasal syringe, but by the gradual solution and loosening of them by a solvent in liquid form, to which should be added some of the ethereal antiseptics, such as thymolf menthol, eucalyptol, etc., to overcome, i, even only temporarily, the objectionable, and to the operator often sickening, odor of ozæna; secondly, after the scabs have there been removed, in the re-establishment in some way, to as great an extent as possible, of the normal capacity and configuration of the anterior nasal breathing channels, at the same time supplying the necessary moisture to be absorbed by the inspired air as in the normal condition; thirdly, in producing a regeneration of the atrophied turbinate tissues by some kind of stimulation to the mucous membrane which would in time re-establish the normal functions of the nose and even cure the invariably present ozæna.

The Antitoxin Treatment of Diphtheria.

Much has beon said by all sorts of men and women about the blessings and utilities of the antitoxin treatment of diphtheria. While it is praised and lauded very high by the most eminent writers and teachers from university presidents down to the humble practitioner, Adolph Ruff, of New York, in Medical Record, comes to the front and says:

Antitoxin and the philosophy of the scientists in its favor as applied to the treatment of diphtheria in human beings is practically a rapidly vanishing possibility, and for the following reasons:

It is now almost generally admitted that the diphtheria antitoxin antagonizes only the diphtheria toxin; and

It is now almost generally admitted that the amount of toxin in a person suffering from diphtheria is an unknown quantity; and

It is now almost generally admitted that the phenomena of diphtheria in the (clinical) sense are induced by bacteria and their toxins other than the Klebs-Loeffler bacillus, and

It is a demonstrated fact that many cases of clinical diphtheria are not specifically Klebs-Loeffler in character, and that a great many Klebs-Loeffler diphtherias are barren of all clinical evidences of diphtheria; therefore,

It may be asserted that on so-called scientific and clinical grounds (the uncertainties of individual resistence in the human subject, the unknown quantity of the disease toxin, the known diminishing quantity and quality in the antitoxic serum, and the arbitrary dosage given by different administrators), as well as for clinical reasons (the impossibility of giving the remedy early enough and before the toxin can do its harm, for antitoxin is powerless against damage already wrought), that antitoxin is practically a remedy of very limited utility, and that the enthusiastic believer aims his variously loaded syringe at a vanishing possibility.

A Contribution to the Study of Tetany.

A. Westphal reports two cases in which this condition was associated with epilepsy. Medical Record. Both patients were women one of whom, six years ago, was operated upon for a goiter, the tumor, however, not being entirely removed for fear of causing cachexia strumipriva. In sdite of this precaution, typical attacks of tetany developed on the second day after operation, and with the exception of a single period of remission, during a pregnancy, continued until the patient came under observation, in January, 1900. Shortly after the onset of the original trouble the condition was complicated by the development of true

epileptic attacks, while the patient's mentality underwent a steadily progressive degeneration, and in addition a gradual failure of vision was noted which was found to be due to double cataract formation. Under treatment with thyreoiodin, in doses of three grains three times daily, great improvement resulted, and from the beginning of July to the time of discharge, six months later, neither tetanic nor epileptic attacks took place, while the mental condition returned nearly to the normal, The other patient was an epileptic dement, also presenting the typical picture of tetany. Trousseau's Chvostek's, and Erb's signs all being present. An attempt at treatment with the thyreoiodin had to be abandoned on account of the development of toxic symptoms.

A Plea for Early Circumcision.

H. G. H. Naylor (Australasian Medical Gazette, June 20, 1901) says: Frequent micturition, loss of flesh, convulsions, phosphatic calculus, hernia, nervous exhaustion, dyspepsia, diarrhea, prolapse of rectum, balanitis, acute phimosis and masturbation are all conditions induced by the constricted long prepuce, and all to be rapidly remedied by the simple operation of circumcision.

In some cases the condition is removed naturally as the child grows, and the penis, by growing, exerts a wedge-like pressure and cures the condition spontaneously, but in the majority of cases no such improvement occurs, and circumcision is the only cure. When it is done early, that is to say when the child is a month or six weeks old, it is virtually well in a week.

Another advantage of the operation is that when at the age of adolescence there is much less disposition for masturbation as the irritation produced by malodorous smegma does not exist.

Then, in adult life there is much less danger of contracting gonorrhea and syphilis.

A Contribution to Experimental Uretero-Cystostomy.

The perfected technique of modern surgery has warranted operative attack on almost every form of pelvic pathological condition, in consequence of which the ureters, so frequently involved in neoplasm and inflammatory products, are often subject to varying degrees of injury. A valuable article of sixteen pages is contributed to the American Journal of Obstetrics by Clarence A. Smith concerning this subject. After many experiments, the citation of many cases and a comprehensive discussion from every standpoint the writer comes to the following conclusions:

It is practicable to anastomose the ureter to the bladder under tension if the two are securely held in apposition till firm adhesions form.

This relation can be attained by the above described method of oblique implantation.

An additional length of one-half to one inch can be safely obtained by traction on the ureter.

The presence of a ligature in the lumen of the ureter is not injurious, because nature conceals it behind new epithelium.

A Case of So-called "Fœtal" (or Congenital) Rickets.

Henry Ashby describes (Medical Record) the case of a child which, at the age of fourteen days, had sustained fractures of the right humerus and radius, and of the left humerus, ulna, and femur, although there was no history of anything like violence. There was marked craniotabes, and the ribs also were abnormally soft. The child was well nourished and apparently born at term. The fractures mended well, but at six weeks the right femur fractured. At nine months the infant had cut two teeth, was bright and intelligent, without any signs of rickets or deformity of the bones. The author connects the condition of the infant's bones with the fact that the mother was forty-six years of age, had become more or less debilitated with childbearing, and had suffered from illness during the greater part of the pregnancy. The case suggests rickets, but a certain amount of caution is required in asserting that it was true rickets, in the absence of a post-mortem examinatin and of a careful examination of the bones by modern methods.

Bullet Wounds.

Sanders reports the case of (American Medicine) a soldier who, while fighting in the trenches in South Africa, was struck on the back of the head with a rifle bullet. There was immediate loss of vision. Ten days later he was admitted to the hospital with a history of having lost consciousness while traveling and having got gradually worse during the journey. He lay in a stupor from which he could not be aroused. His temperature was 103.5 deg. F.; pulse 76. In the right occipital region a half inch above the external occipital protuberance and 1½ inches from the median line there was a suppurating wound. Operation was undertaken and an opening was found beneath the scalp through which the bullet had entered into the skull. A portion of the brain bulged. There was no pulsation

and the brain substance felt tense and elastic. A small bead of pus was seen and on entering a probe at this location it passed for nearly two inches. The opening was dilated and 4 drams of pus were evacuated. The abscess cavity was washed out with sterile water and drained with a tube. The patient improved uninterruptedly and four weeks later the wounds had entirely healed and he was able to get about. In both eyes the vision was limited to a small area around the fixation point. In most directions this did not exceed 5 deg. and in none did it reach 10 deg. There was no decided difference in the eyes. The patient was unable to read ½-inch type farther away than 2 feet. His condition did not improve during the 2 months in which he was under observation. There was no mind blindness in this case, but the chief difficulty is to explain how the very extensive impairment of both visual fields was produced by an apparently unilateral lesion.

An Unusual Case of Gastric Ulcer.

F. H. Murdoch (New York Medical Journal) reports a case of this kind occurring in a hotel keeper, aged thirty-three years, whose trouble began with distress after eating, bloating and belching. From time to time he had attacks of severe gastric pain, obliging him to lie down. Temporary relief followed the vomiting of a large amount of hot, sour fluid. Examination of the stomach contents after a test breakfast, revealed absence of free HCl, but rennet and pepsin were present. Lactic acid was absent. Later examination showed the presence of HCl in the vomitus. On one or two occasions he vomited blood. The peculiar feature of the case was the large amounts of hot, sour fluid vomited. This proved to be gastric juice mixed with particles of food. Stomach washing afforded great relief. Intense thirst was a feature of the case.

This periodic continuous flow of gastric juice was first described by Reichman, and is known as Reichman's disease, or gastrosuccorrhœa continua periodica, to distinguish it from the chronic form of the disease.

Carbolic Acid in Burns.

Otto L. Muench advocates (Medical Record) the application of pure carbolic acid to burned surfaces, having used the same with most excellent results in cases of small burns of the first degree, in a case of scalding involving the chest, neck, and shoulders of a twelve year old child, and in a case in which the "entire head, face, neck, and hands were one burn." The application of the acid stops the pain by producing local anæsthesia of the peripheral nerves, and its escharotic action is neutralized by coagulation of the albuminous effusion, this latter completely excluding the air and preventing infection.

The Comparative Virulence of the Tubercle Bacillus from Human and Bovine Sovrces.

Dr. M. P. Ravenel (Lancet, August 17, 1901, p. 443). The author makes the following statements:

The tubercle bacillus from bovine sources has in culture fairly constant and persistent peculiarities of growth and morphology by which it may tentatively be differentiated from that ordinarily found in man.

Cultures from the two sources differ markedly in pathogenic power, affording further means of differenentiation, the bovine bacillus being very much more active than the human for all species of experimental animals tested, with the possible exception of swine, which are highly susceptible to both.

Tuberculous material from cattle and from man corresponds closely in comparative pathogenic power to pure cultures of the tubercle bacillus from the two sources, from all animals tested.

It is a fair assumption, from the evidence at hand and in the absence of evidence to the contrary, that the bovine tubercle bacillus has a high degree of pathogenic power for man also, which is especially manifest in the early years of life.

The Care and Treatment in Convalescence from Functional Nervous Disease.

F. Savary Pearce, in the International Medical Magazine, sets forth the fact in a very clear manner that the care of patients convalescing from such diseases as neurasthenia, hysteria and chorea, the three principle diseases discussed under the title, has been greatly neglected. No one will deny this assertion. For the want of a better name these patients are usually classed under the misapplied general title "generally nervous." The treatment and management of these cases is considered under three heads: Mental care, physical care and adjuncts, and medication. The writer is of the opinion that this class of patients should be schooled and educated in self-control. He says:

"This may seem to savor a bit of charlatanism; but when the profession learn to better appreciate that there is really a psychologic basis, a suggestion, in this form of therapeusis, there will be less chance for Christian Science and other fads, with more adherence to true medicine, so that the

proper balance may some day be reached, and the modest medium of common sense more generally prevail. Nor will there exist, at that happy time, any basis for the rather trite slur at the social fabric which Mr. Dooley has recently expressed, in effect, that Christian Science believes that there is no disease, and physicians believe that everything is disease."

Discussing the subject from a physical standpoint he thinks the prime reason for delay in the cure of such patients is due to the fact that they, feeling the burden lessened and cure set in, in their exhilaration, return to their usual method of living, of strain and overwork. Disaster usually follows. It is an axiom of nature that rest should follow after the central neurons have once been depleted, physiologically or pathologically. Exercises that keep the patient from his usual line of thought, or prevent him from thinking about himself, should be enjoined. Rowing, canoeing, horseback riding are recommended in preference to golfing, tennis playing or bowling.

From a medical standpoint it is essential to treat symptomatically organs that are disturbed in function during convalescence from diseases under discussion. The writer cites several cases where the use of internal antiseptics with semi-rest cure acted efficaciously. When much anæmia exists, Blaud's pills, 5 grains 3 times a day, salt sponge baths at night and of arsenic in small doses. Woolen underclothing is very essential.

The purport of this paper is good. It shows we have been too neglectful of these distressing cases: it shows that the care of minor details is of the highest importance, and that the skillful use of mental therapeusis is most efficacious.

The Diagnosis, Ætiology, Prophylaxis, and Treatment of Cystitis, Pyelitis, and Pyelonephritis in Women.

There is probably no subject in the domain of medicine less understood than that of the infections of the urinary tract in women, or one in which a misenterpretation of the conditions found leads to more deplorable results. Concerning this question a very valuable article appears in the New York Medical Journal from the pen of Thomas Brown. Summing up his article he says:

1. The great majority of cases of pyelitis, pyelonephritis, and cystitis are due to to infection with various micro-organism (of which the colon bacillus is the commonest) which may reach the kidney or bladder either exogenously or endogenously.

2. That in the majority of cases the condition either can be prevented or can be cured if the conditions underlying its development are recognized and understood, and the correct measures inaugurated.

3. There are various conditions, such as urinary hyperacidity, which may simulate almost exactly true vesical infections, and yet in which misinterpretation and improper treatment may lead to the development of a true cystitis and its deplorable consequences.

4. In no condition is prophylaxis more essential than in that of the infections of thé urinary tract, while, to be able to prevent such conditions, we must have constantly before us the danger of the development of infection in all cases associated with conditions which tend to lower the general resistance of the patient, and also those which render the bladder susceptible to infection, especially by the trauma of an operation or catheterism.

5. While an absolute diagnosis of renal infection can be made only by ureteral catheterism, in the majority of cases a very probable diagnosis may be arrived at by a consideration of the relation between the grade of albuminuria and pyuria and by careful cystoscopic examination of the bladder, especially that portion about the ureteral orifices, and the character of the urine flowing thereform.

6. Contrary to the opinion expressed in the majority of text-books, a great majority of the infections both of the bladder and of the kidney are associated with acidity of the urine—that is, due to micro-organisms which do not split up the urea.

7. Probably in the majority if not in all the cases of renal infection due to a urea-decomposing micro-organism, after the condition has lasted for a certain length of time, a stone is formed by the decomposition of the precipitated salts about the bacteria as a nucleus.

8. And, finally, to be able to thoroughly understand the cases of cystitis, pyelitis, and pyelonephritis brought to our notice, to make the proper diagnosis, to inaugurate and carry out a rational line of treatment, to be a conversant with the proper means of prophylaxis, and to give a correct prognosis, a careful chemical, microscopical, and bacteriological study of the urine is absolutely essential.

Diets for Every-Day Use.

The question of water-drinking is not an idle one. J. Warren Achorn gives us some good advice regarding the use of drinking water in the Dietetic and Hygienic Gazette. He is of the opinion, and rightly too, that people do not drink enough water, or if they do, it is at the

wrong time. He thinks water goes best on an empty stomach, and better if sipped. Ordinarily a glass of water may be better with meals, but where large quantities are gulped down during meals much harm results. In myasthenia the use of water should be restricted to the needs of the system—enough to quench normal thirst and promote the healthy action of the skin and kidneys. Hot water is soothing and quickly absorbed; it stimulates the secretions of bile and is a solvent of retained products in the system. Those suffering from a rheumatic diathesis, where there is no disorder of the stomach, hot water is beneficial. In hyperacidity he recommends hot water half an hour before meals. A healthy condition of the skin, bronchial tubes, kidneys and intestines, and their full activity as eliminators, can best be secured and maintained by exercise and the proper use of water. We see "dessicated" nerves, tongues like parchment, skins as dry as sand paper, urine as red as wine, and faces filled with grease and blackheads from the lack or misuse of this grateful solvent."

Disappearing Tumors.

Scattered throughout literature are more or less vague descriptions of tumors supposed to be true neoplasms, which under observation, apparently disappeared and did not recur. A. S. Warthin in Medical News, points out a few clinical facts worthy of mention.

First, that in spite of skilful clinical observation, the ultimate behavior of a tumor is seldom to be determined except by microscopical examination, and that many seeming malignant neoplasms are taken to be such when really they are but the outoome of an inflammatory condition.

Second, that probably no true neoplasm, malignant in nature, ever disappeared except through retrograde changes induced into itself through infection of the tumor tissue, or through affections or infections of other parts of the body having, by reason of toxins, practically the same effect. To this there are extremely rare exceptions in which the disappearance of the growth takes place by an excess of retrograde processes over those of growth.

Third, that we must look to the inflammatory process, acute or chronic, for the explanation of the appearance and disappearance of these masses of tissue which before and even during exploration appear to be actual new growths.

The Excision of the Tonsils.

R. C. Matheny, writing in the Medical Record regarding the excision of the tonsils, says the condition for this procedure are the following:

A simple hypertrophy of the tonsils which causes them to occupy so much of the pharyngeal space as to prevent the entrance of sufficient air in breathing. But this would have to be considerable so as to cause the pharyngeal space to be of less caliber than the trachea.

In cases in which the hypertrophied tonsils have pressed on or drawn upon the pharyngeal opening of the Eustachian tube so as to close it or distort it and thereby interfere with its function.

Hypertrophied tonsils that are subject to recurring attacks of tonsillitis.

Tonsils that have previously been subject to recurring inflammations when the function of the organs has been destroyed and which show considerable degeneration.

Tonsils whose crypts have become filled with caseous matter which is offensive, conducing to foul breath.

Tonsils that are subject to lacunar ulcerations.

Cases that have developed a quinsy habit. In these cases the removal of the tonsil generally prevents a recurrence of the quinsy.

In cases of lupus or tuberculosis of the tonsil, as well as in cases of malignant growth.

When the enlarged tonsils interfere with voice production to the extent of annoyance or incapacity for continued speech, or where they interfere with the production of pure tones in voice culture.

After the age of puberty there sometimes remains a mass of more or less fibrous tissue, occupying the tonsillar spaces, which has lost most of its lymphoid characteristics and partakes of the nature of a foreign growth; when these are inimical to comfort or well being they should be removed.

Dog Liver Oil.

Dog liver oil comes to the front as the latest cure for consumption. One beauty about this dogs will be easier and cheaper to get than cod fish—hence theo il will be much less expensive. The Journal American Association commenting editorial says:

The latest consumption cure—or rather one of the latest, for new ones are bobbing up almost daily—hails from one of our interior cities, and, as given out in one of the dailies of that city, it does not seem an attractive one. The gentleman who has the contract for the removal of dead animals from the streets has found that an oil prepared from the hearts and livers of dogs is a sovereign cure, and a number of cases are named where wonderful results

are said to have followed its use. All other seekers for a cure are said to be wasting their time, now that the virtues of the extract from the hearts and livers of deceased canines have been discovered; thus dog liver oil, is to be the oil of the future. The associations in the account are not exactly such as to make the preparation particularly appetizing, but what does that matter with an infallible cure for such a disease! It finds a utility in even a dead dog, which has heretofore been the very superlative expression of worthlessness.

Ergot in Obstetrtcs.

There is a great diversity of opinion as to the use of ergot in labor, many of our best physicians asserting that it should not be given under any conditions until after the head has been expelled from the uterus. Hugh D. Rodman, in the American Practitioner and News, writes very pleasingly about this matter and gives a number of cases of labor with and without ergot. He says there are those who give it at the very onset of labor and continue it through entire labor. This he says is an erroneous idea. Ergot was used in labor by the peasantry of some parts of Europe several hundred years ago, but the writer says its introduction into modern sciences is due to the indefatiguable efforts of Dr. Stearns, of New York, in the early part of the last century. The writer earnestly advocates the use of ergot in all lingering cases (except primipara) where there is a soft, well dilated os or easily dilatable os and vagina and the external genitals are in the proper condition, with head presenting and vomiting necessary to terminate the woman's suffering except active expulsive pains.

In the writer's own language he says: When I meet this kind of case, which I do in at least one-half of all my labor cases, I feel that I would not do my duty to my patient, I feel that I would be guilty of neglect, would be false to the charge entrusted to me, yea, would even do violence to both the mother and the forthcoming child if I did not give ergot. I am so fully convinced after a long experience and bedside observation of twenty-five years that this course is the proper one for me to pursue that I give but little heed to an opposing opinion, holding as I do that my own close observation is worth more to me than the views of any one. I can say with a clear conscience that since I have used ergot in this way my per cent of stillborn children has decreased at least one-half, and that a stillborn baby is now a rare thing with me. I believe that in former years I have sat idly waiting for nature, or only assisting her by the use of a cup of hot tea or by walking the patient about the room, or such other domestic practices as were suggested by the nurse, until the baby died before nature could do her work, whereas if I had given ergot I would have saved the mother many hours of suffering, both mentally and physically, and perhaps saved the baby's life, which is far more important than all else.

The writer reports several cases where ergot was not used in tedious lingering labors and in almost every instance the child was either stillborn or born feeble and died later. He asserts that he uses ergot in 75% of his labors in multipara and has not delivered a stillborn child in ten years.

Epidemics of Smallpox.

As the cool weather approaches our thoughts turn to the subject of smallpox. There was an order given in our graded schools recently that all children who had not been vaccinated should do so at once or they would be barred from school. This is the proper way to check its progress. In a paper by J. W. Preston, in the Virginia Semi-Monthly, on the subject of smallpox closes as follows:

I feel that I am justified in saying that the very mildness of an epidemic of smallpox is its danger, and, in the least marked cases, taken along with no known exposure, the most experienced and accurate observer must need hesitate before making a positive diagnosis. The general practitioner who fails to report such a case, or health officer who neglects to isolate it, awaiting developments, subjects his community to unwarranted risks, and has no right to complain if he himself is the subject of adverse criticism.

Feeding in Typhoid Fever.

The selection of the proper article of diet in the management of a case of typhoid fever is very intellegently given in an editorial in the Pennsylvania Journal for Sept. 1901. The writer believes that this is as much importance as the medication. He says:

The selection of the proper article of diet does not cover the entire responsibility in this connection. The giving or withholding of food is the question which must first be disposed of, after which the selection of the appropriate articles is to be determined. It is the part of wisdom for the medical attendant to observe and be guided by the manifestations of nature's laws, of which the patient gives evidence, so that when a patient, in the earlier stages of

typhoid fever, expresses not only an absence of hunger, but an abhorrence of food, it is illogical to insist on his swallowing articles for his nourishment. It is known that in pyrexia, the digestive functions are in abeyance and that food placed in the stomach instead of being prepared for absorption, by the digestive juices of the mouth, stomach and intestines, undergoes fermentation with elaboration of gases and toxins dangerous to the organism. The anorexia which is almost universally found associated with severe cases of typhoid fever, may be recognized as one of nature's preventive measures, and the patient's natural tendencies should not be disturbed by meddlesome interference which would subject them to the ill effects of the fermentative changes that follow the ingestion of nutrient materials, under the conditions cited. The most flagrant violatlon in this line, is the administration of given quantities of milk at stated intervals during the period of anorexia. It is as unreasonable, as was the old time practice of refusing water to these same patients, when consumed with thirst—a time when the system is charged with toxins from the pathogenic bacteria, which are best eliminated by flushing the organism with water for which the sufferer cries.

The statement made by a writer in this issue, that patients who succumb in the latter stage of typhoid fever, under delirium, die of starvation is incapable of proof. It is much more rational to believe that they die of a secondary toxemia induced by the ordinary bacterial inhabitants of the intestinal tract, which assume virulence in the condition of general devitalization subsequent to the typhoidal infection.

For many years it has been the writer's practice to be guided by the desires of the patient in the matter of feeding in typhoid fever, and with the happiest results. Until a natural desire for food is manifested, the patient's inclination should be respected. The first sign of hunger, however, must be met with appropriate material, non-irritating and easy of digestion.

In the treatment of typhoid fever by the so-called intestinal antiseptics as for example, guaiacol, all who have given it a fair trial will admit that the tympanites, condition of the tongue and mouth in general, formerly characteristic of the third week of typhoid fever, are beneficially influenced. About the end of the third or beginning of the fourth week, the temperature often becomes normal, hunger becomes a prominent symptom, and a return to solid diet is earnestly requested by the patient though the tongue remains coated. To acquiesce to his pleadings, however, before the tongue has resumed its normal red color is to invite a relapse attended by the symptoms characeteristic of the second week. It is reasonable to believe that under the adminstration of the antiseptics, the intestinal fermentation has been held in abeyance with cessation of the ordinary symptoms before the intestinal ulcers have healed, and a return to solid food at this period, results in the aforesaid relapse.

Gastro-Jejunostomy in Gastrectasis.

Abdominal surgery as practiced today by American surgeons is a typical demonstration of surgical ingenuity and application of methods approaching perfection. The peritoneum is as "second" today as of old, but modern asepsis has robbed this dangerous to—invade sac of most of its bars to intrusion. The following deductions are given by O. H. Cardier in St. Louis Medical Review regarding this subject:

Cancer of the pylorus, even though removed, returns quickly, and always kilis.

Pylorectomy is attended by a high mortality and is not a justifiable surgical procedure in advanced carcinoma of the pylorus.

Gastrectasis, due to malignant closure of the pylorus is best treated by a gastro-jejunostomy. The operation as advised by Wolfler or Von Hacker best meets the indications.

It is not necessary to twist the bowel, in making the anastomosis, to prevent the bile from entering the stomach.

The anastomotic opening in the stomach should be at the most dependent point of the dilated organ.

The operation is attended by a low mortality.

In all cases in which marked dilatation of the stomach exists, accompanied by emaciation, pain and invalidity, the operation of gastro-jejunostomy should be performed. Relief from pain, due to the effort of the stomach to relieve its self, follows this procedure at once.

The patient gains rapidly in weight and, if no malignant disease be present, his former good health is restored.

The Therapeutics of Whooping Cough.

From time to time we have thrust upon us a new remedy for whooping cough. These remedies are numerous and various. Reviewing them all we stand as helpless in combatting this disease to-day as we did twenty years ago. Discarding the bromides, camphor, chloral, chloroform, bromoform, quinine, antipyrine, phenacetine, carbolic

acid, &c., Thos. J. Mays, in the N. Y. Medical Journal, offers a new and unique treatment. He is of the opinion that disorders of the pneumogastric nerves is not only responsible for all the various forms of spasmodic cough, but also plays an important part in the evolution of many diseases of the lungs. He highly recommends counter-irritants over these nerves in the region of the neck and the most signal benefit has followed.

The practical way of applying this remedy, as given by him, is as follows:

Trace the pulsating carotid artery from behind the angle of the lower jaw to the clavicle on both sides of the neck. This will be a landmark for finding the pneumogastric nerves which lie in close proximity and slightly behind the carotids. Gentle massage and kneading of this region of the neck, every hour or two, yield beneficial effects in many cases of this disease. The application of a strip of mustard plaster, about two inches wide, from the angle of the lower jaw to the clavicles on each side of the neck, two or three times a day, until the full effects of the mustard are evident, is almost sure to cause amelioration of the spasmodic cough. Equal parts of gum camphor, chloral hydrate, and menthol, applied over this region, are also very useful. Painting the same area with tincture of iodine, twice a day, until irritation of the skin is produced, is a beneficial procedure. Finally, in very stubborn cases the hypodermic injection of silver nitrate over the vagi must be resorted to in accordance with the following plan: Lift the skin over the vagus between the thumb and the forefinger of the left hand, introduce the hypodermic needle just under the elevated skin, and inject five minims of a two-and-a-half-per-cent. solution of cocaine hydrochloride. Detach the syringe from the needle and allow the latter to remain in the puncture. Wash out the syringe with water, draw a two-and-a-half-per-cent. solution of silver nitrate into the syringe, attack the latter to the needle, and throw in from three to six minims of the silver solution.

Under the influence of this line of medication the child becomes more comfortable, the paroxysms become less frequent, the severity of the cough diminishes, and altogether the affection assumes a different character, often in the space of a day or two.

Treatment of Hypertrichosis by the Rontgen Rays.

Havos, in Boston Medical and Surgical Journal, refers to the injurious effects that have been noted in certain cases from exposure to the Rontgen rays. Idiosyncracy he thinks plays an important part in the cutaneous manifestations. Daniel was the first to observe the falling of the hair under the influence of the Rontgen rays, and Freund the first to use it therapeutically. Havos says:

It is possible to cause falling of the hair by means of the Rontgen rays without causing disfigurement of the skin.

In his experience this alopecia is only temporary, although persisting perhaps for months.

The greatest caution should be observed in the application of the method, and when inflammation occurs the procedure should be stopped until all inflammatory signs have disappeared.

The procedure must be adapted to individual susceptibility. The exposure should at first be made at a distance of 30 to 40 cm. and for 10 or 15 minutes only, so that the susceptibility of the patient may be tested.

Long exposure and frequent repetition of them are harmful and even dangerous, as they may cause obstinate and painful ulcers and scars.

He believes the method should only be practised in those cases where the affection is spread over a large territory, where other means of destruction are impossible, and when the patient has been thoroughly informed of both the advantages and disadvantages of the method.

As the method is still in an experimental stage, we must be cautious in our judgment of its therapeutical success.

Its further trial, however, is justifiable and desirable.

The Therapeutic Value of Alcohol.

There are those who consider alcohol useless as a medicine from every standpoint; there are those who are partly reconciled as to its utility just at the close of life; there are those who recommend it highly as a stimulant and place great confidence in it as a therapeutic agent. Leon L. Solomon, judging from his article in American Medicine, we would place among the latter class. He discusses alcohol *purely as a medicine*. To get beneficial effects he lays great stress upon the *purity of the alcohol*. He says:

These and other so-called "rectified goods," if not absolutely harmful, are, as a general rule, at least devoid of medicinal virture. That they make a drink agreeable to many is not denied, neither would we question the peculiarly pleasing—too often subtle—influence on the nervous system, which they possess—an influence sometimes

extremely exaggerated with these fancy brands. If the process of distillation has been unknowingly or carelessly carried too far, whereby amylic alcohol (fusel oil) comes over, the effect from the administration of such alcoholic liquor is at once directly harmful. Pure ethyl alcohol is ½ less lethal than an impure one containing amylic alcohol.

Too often, I fear, those who condemn alcohol in medicine, have reached conclusions, along false premises. The specimen used was not pure, the indication, for it was not exact, the size of dose may have been improperly gauged, or the time of administration possibly wrong; all of these points are necessary in the exhibition of any drug, but more especially, when any of the active and powerful list, to which alcohol belongs, is being used; *purity* is sine qua non; next, a clear and definite idea of the indication the drug is supposed to meet and the effect it will produce, including the by effects, its untoward action —all these are essential, ere we can say *any* drug has been properly manipulated. The stage of the disease and the stage of the system are other factors deserving of especial attention, and the time of day with respect to the administration of alcohol is not less important; for, alcohol is as often an emergency drug, as any other member of the stimulant group and the hours between 12 o'clock, midnight and 7 o'clock, a.m. most frequently (because, then vitality is at its lowest ebb) demand the free use of alcohol. There are times, when, seemingly we can employ it, at regular intervals, throughout the 24 hours—here its food quality and antiseptic property are in demand and it manifests its force as food and as antiseptic. In this connection, I must refer to the minds—in this, misguided, though otherwise well balanced—which seek, using every means and bending every energy, to convince the total abstainer, as well as the inebriate of the curse of alcohol, of its utter uselessness and veritable damnation under any and all circumstances.

The writer especially recommends the use of alcohol in low fevers. By its use the muttering delirium disappears and quiet sleep follows, the tongue grows moist and the pulse becomes regular and full, &c. If by the use of alcohol we get these beautiful effects, there can be no question as to its great usefulness. In reference to alcohol being a narcotic and paralyzant as maintained by some is true; alcohol is a paralyzant taken in large quantities, the writer says, however, no more so than opium, digitalis. aconite, and many other drugs. A healthy man does not need alcohol. Along this line the writer throws out some wise suggestions. In reference to alcohol as food, he admits it has this quality in a certain limited sense, but nature has supplied us with food far superior and, in his words, to employ alcohol, merely to whip out latent energy, except as the drug is indicated and demanded in the sudden emergency of disease, or otherwise in medicine, is a crime both against God and man. Better a life less "hard in work and less full of responsibility," and posterity might then be permitted to boast of the real, the genuine accomplishments of *normal* man (unaffected by stimulants) in "modern times."

Alcohol is a conservator of vital power. It adds force, if it does not add tissue to the body, and, within certain limitations, may be called a food.

Alcohol must be in a state of dilution before it can be absorbed.

Alcohol is almost a perfect aseptic fluid. Its properties locally are: antiseptic, disinfectant, astringent hemostatic, anhidrotic, rubefacient, anesthetic; 18% strong, it is an anti-ferment. It is therefore applicable as a dressing to remove fetor, destroy germs, and stimulate tissue growth in suppurating wounds. In healthy wounds by coagulating albumin, an impermeable covering results, hastening cicatrization. In hemorrhage alcohol is serviceable as an astringent, controling capillary oozing, or as a tampon in the uterus, In the arts, alcohol is much used, and in pharmacy to dissolve alkaloids, fatty substances, and resins.

Having shown the variety of properties alcohol possesses and some of the multiform offices it performs—one more concluding thought: In its proper, internal, therapeutic application, the utmost, discriminating judgment and extraordinary care are necessary.

"Sincerity."

There appears a short editorial in American Medicine on sincerity which we quote below. It would lead one to believe that there are some who think no matter what they do if they are sincere makes it right. It is indeed well to be sincere, but sincerity without other virtues goes for very little:

"As one intellectual weakling after another tumbles over into christian science or some form of medical quackery, each pretends to find his justification in "sincerity." For example, one preacher in announcing his adhesion to Eddyism and his intention to "start a school" of "medico-psychology" calls Dowie "insincere" and "a swindle," and accounts for Mrs. Eddy's success because of her "faith" and "sincerity." Of

course men of any historic or psychologic knowledge do not make such silly errors. The whole phenomenon of unchristian unscience, etc., is a mere corollary of the modern delusion of democracy that an ignorant person is as good a judge of a matter of science as the expert who has seriously studied it. Medicine and psychology, or even "medico-psychology" requires years of calm study, observation and experiment, to warrant opinion or judgment. Sensational egotists by the hundred, without an hour's study of medicine, without any right to an opinion, at once announce their cocksure philosophy concerning the entire matter, and start "a school." They are sure they are right because they are "sincere." It is indeed well to be sincere, but sincerity without other virtures is the single excuse the ass has for braying. Sincerity does not make the braying either language or music. Sincere were the inquisionists, the witch-burners, the seekers after the fountain of eternal youth, and a thousand modern types of half-crazy fad-riders. Have I a right to be sincere?—is the question they should all ask themselves, A divine who says Dowie is insincere and Mrs. Eddy sincere has too little acumen to be a teacher either of religion or of "medico-psychology."

Fibroid Tumors of the Uterus.

The traditional teaching says Charles P. Noble, in The American Journal of Obstetrics, concerning fibromyomata of the uterus is that these tumors are of frequent occurrence, that only exceptionally do they produce symptoms, that after the menopause they tend to undergo a spontaneous cure, and that only in the rarest instances do they cause death. This teaching while additional, has never been universally accepted. It has been combated from time to time by those having to deal with grave conditions arising from the presence of fibroid tumors. After quite a lengthy and interesting treatise of this subject, the writer concludes his paper with the following language:

We are now able to contrast the mortality of fibroid tumors, including that of their degenerations and complications, with the mortality of operation—upward of 33½ per cent. with less than 10 per cent; also the morbidity incident to the history of fibroid tumors as compared with that which follows operation, in which the comparison is very much in favor of operation. From all the facts presented the conclusion is inevitable that the proper treatment of fibroid tumors of the uterus is their early removal. Early operation not only greatly lessens the mortality, but, what is perhaps of more importance, it saves the long period of invalidism which is otherwise unavoidable.

Believing that the best treatment of fibroid tumors in general if their early removal, the question remains whether there are no exceptions to this rule. The best answer to this is that each case must be decided upon its merits. It is my individual experience that small multindoular subperitoneal fibroids in women 40 years of age or more are the least apt to grow and to cause serious symptoms. Conversely, submucous and intramural fibroids in younger women are the most apt to develop and to cause serious trouble. It has been my experience to meet with but few fibroids which were not producing symptoms, and it is therefore my belief that the percentage of cases is small in which operation is not more advisable than expectancy.

The Racial Factor in Hysteria.

This disease ever coming to our attention by the very accuracy with which it was simulating organic nerve diseases, is confined to no latitude, country or people, and if we would use comparative methods of studying it we might find well authenticated examples of its existence as noted by competent observers in lower animals. Julius Ullman in Medical News is of the opinion that hysteria is seen among all people and in all countries, and the fact that it affects certain races more than others, like the Jewish and Latin races, may be attributed to causes of enviroment rather than inherent qualities of a race.

Heredity plays a role only in that the child may learn to imitate certain traits of its parents, the environments and habtits remaining the same. In concluding his article he says we must not forget the hysterical background which may be an epiphenomenon in certain organic diseases, in certain races such as the Slav, Latin, Israelite, nor, on the other hand, to slight the fact that, though symptoms of hysteria are well marked, as they usually are among Russo-Polish women, they may at the same time be suffering from organic disease.

Better therapeutic results will therefore often be obtained among the susceptible races, or those in which hysteria is most common, by drugs, suggestion and mechanical means of treatment directed against a latent hysterical condition in addition to treatment for organic disease if it be present.

The Place of Cereals in Infant Feeding.

Chapin (Med. Rec., July 6, 1901) says that the profession has recognized by long clinical experience that a certain judicious

use of the cereals is frequently beneficial. The introduction of system into infant feeding has been a great advance, but it has emphasized the fact that changing percentages does not change cow's milk into woman's milk. Practice has shown that each infant is a law unto itself, no matter what method of feeding is employed. Infant's food should curd in flocks or loose masses, and there should be a moderate supply of easily absorbable food seperated at the time of the curds form. To break up the curd of cow's milk and furnish absorbable food, cereal gruels, in which the starch has been converted into dextrin and maltose, are the most practical and desirable agents. If, when modified milk disagreed, all milk was cut off for a few feedings, and then a new beginning made a great deal less trouble will be experienced than by attempting to shift percentages slightly. It would seem that by beginning with a predigested cereal and adding milk to this, nature would be pretty closely followed in furnishing part of the food in a readily absorbable condition and in rendering the remaining portion soft and flocculent. The curd of cow's milk should be broken up mechanically, and as cereal gruels break up those curds mechanically and as infants are able to utilize them, their use is rational.

The Transmission of Yellow Fever.

A keen interest now centers in this subject on the part of scientists in almost every civilized land under the sun. H. H. Haralson, in the Mississippi Medical Record, says:

From the beginning to about the middle of the last century the views of a majority of the profession as to the transmission of yellow fever, and as to what constitutes fomites might be sumed up about as follows:

The first place must have become infected some how.

Places having become infected may infect persons.

Clothing, bedding, merchandise, etc., having become infected may impart the infection to other places susceptible to such impartation.

Ships on being infected may impart the infection to places in sufficiently close proximity, provided the place is susceptible to the infection.

No articles of clothing, bedding, or merchandise, can be regarded as fomites unless they contain miasms other than those generated in the bodies of persons sick with or dead of yellow fever.

Miasms generated in the bodies of those sick with or dead of yellow fever cannot impart the disease, and all clothing, bedding, merchandise, etc., containg only such miasms cannot be regarded as infected.

These views were embraced at the time when the profession abandoned the theory of contagion, or at about the close of the eighteenth or the beginning of the nineteenth century. By the middle of the nineteenth century there were very few members of the medical profession who held to the theory of contagion. The closest observers of the disease at that time freely contended that it could not be transmitted by clothing, bedding, articles of mercandise, etc. if such articles contained only miasms generated in the bodies of those sick with or dead of yellow fever. Numerous experiments were made to test the question of the communicability of the disease by inocculation, by swallowing black vomit, by the utmost possible exposure and they all lead to negative results.

In 1805, Don Cabanellos, a Spaniard, who did not believe in the transmissibility of the disease by fomites, slept a night with his children in beds in a Lazaretto, in which yellow fever victims had died. A number of galley slaves accompanied him. The whole party amounted to fifty and not one contracted the disease.

Suggestions in Infant Feeding.

Nature has decreed that the food of all young mammals shall consist of certain definite elementary substances—fat protied, sugar, inorganic salts, and water. Chas. Gilmore Kerby in Medical Record, giving some good advice says:

In feeding a baby other things have to be taken into consideration than the adaptation or preparation of the milk. The social conditions, the financial, and the mental capacity of the mother must be passed upon. I have out-patient children whose mothers cannot afford to buy cow's milk; I have out-patient children whose mothers have not the time, or will not take the trouble, to manipulate cow's milk, cream, and milk-sugar if they can afford it; I have those who are not sufficiently intelligent to prepare an adapted food if they have the means; others cannot afford ice, and have no ice chest if ice were given them. The children of the poor and the ignorant must be fed, and we must instruct the mothers as to the best available means. If she can purchase cow's milk, she is advised as to its use; our instructions are to use it thinned, diluted with a cereal water to which sugar is added. This gives a week fat food, the fat being supplemented, except during the hot months, by the

use of cod-liver oil. If cow's milk is not within the means of the mother, condensed milk is substituted. A ten-per cent can of condenced milk will supply food for from two to three days,and will keep sweet during this period. The child will live on it, and some thrive fairly well for a short time. The condensed milk is also supplemented with cod-liver oil. I have yet to see a child,however—and I have critically examined thousands of them—who had been fed exclusively on the proprietary foods or condensed milk, for a period of three or four months or more, who did not show some signs of malnutrition. They are usually under-sized, rachitic, have poorly developed and flabby muscles, and show a loss of inhibitory control.

Given an intelligent mother or nurse, with means to buy milk and ability to prepare it, there is but one substitute for breast-feeding. Physicians must learn, in order successfully to feed infants, what cream and milk contain, and then in an average feeding case they must combine milk, cream, water, and sugar in such proportions that the relative strength of the fat,sugar, and proteid as found in mother's milk is maintained, regardless of the general strength. Thus, mother's milk contains about twice as much sugar as fat and about two and one-half times as much fat as proteid.

Oral Sepsis.

This is an age of precaution; it is a prophylactic age, an antiseptic time.

The hands are boiled and gloves are used; the instruments are sterilized, and from a cleanly standpoint nothing is left undone. Yet with all these precautionary measures the surgeon will have a series of unfortunate results. In the Interstate Medical Journal is an editorial touching wisely upon this subject:

In these days of extreme antiseptic care it sometimes happens that a surgeon will have a series of most unfortunate results. Patients will die with all of the symptoms of sepsis, and yet the operator will assume to have used every care. Indeed, so far as attention to his hands, instruments, solution, attendants, the patient and the room, he has left nothing undone. It is probable that the patient was in the average condition of strength and recuperative power, and that the operation was not extremely dangerous.

Dr. Hunter, of London, has recently written a monograph upon oral sepsis, which is suggestive. It is true that he studies this subject in its causative relation to gastritis, toxic neuritis and other septic conditions, but surely his field can be greatly enlarged. If, as he seems to prove, from local infection, such as dental carries, tonsilitis, pharyngitis and ozena, there may result a general auto-infection, is it not more than possible that many cases of sepsis may be the result of infection conveyed by the breath of the operator to the open wound of the patient?

This opens up a very serious question. One of the most accomplished surgeons the writer has known had a most offensive breath from long-standing chronic pharyngitis. His results in certain operations were most disappointing—many of his patients dying from sepsis. We have seen scales of dandruff fall from the head of an operator and drops of perspiration from his face, into an abdominal cavity. His hands were scrupulously clean, but his head and face doubtless contained many germs.

We are neither captious nor critical, but we insist that the guarding of the patient from the danger of infection from the breath and other carriers for infection from the operator is not a small one. And it is all so easily prevented. A towel around the head; a mask covering all the face but the eyes, readily made and easily adjusted; these or similar appliances would undoubtedly be additional safeguards in all important operations.

Pelvic Indications for the Performance of Cesarean Section.

J. Whitridge Williams in an able paper in American Medicine impresses the fact upon his readsrs that contracted pelvis are not of infreqnent occurrence, and that the repeated delivery of dead children in such cases is not justifiable, and that a woman who has lost one child from contracted pelvis should, she become pregnant again, be put in the hands of some one who is capable of leading the case to a hopeful termination. Concluding his article he says:

Two hundred and seventy-eight cases of contracted pelvis were noted in 2,123 consecutive cases of labor (12.1%) occurring in every fourteen white and every sixth black women.

Spontaneous labor occurred in 71.58% of these cases, but drcreased rapidly in frequency as the contraction became more marked. When the conjugata vera measured between 10 and 9 cm.. 77.28% of the cases ended spontaneously; between 8.9 and 8 cm., 61.54%; between 7.9 and 7, 33⅓%, and when 6.9 or less cm., none ended spontaneously.

In view of present low mortality attending cesarean section (3 to 4%), the indica-

tions for its employment, should be markedly broadened if the patient is uninfected and in suitable surroundings, the child in good condition and the obstetrician a competent operator- The absolute indications should be extended from 5.5 to 7 cm., and the relative indication from 7 to 8.5 in flat and 9 cm., in generally contracted pelves.

In the interests of the child, in moderate degrees of pelvic contraction, forceps upon the movable head and version should be abandoned, and cesarean section performed if the head shows no signs of moulding and descent after one hour of second stage pains.

The operation should not be performed for the relative indication in infected mothers, as under such circumstances, perforation is the operation of choice, if delivery cannot be effected by high forceps or version; while if the absolute indication be present, the Porrocesarean section should be performed.

The Place of Symphysiotomy as Contrasted with Cesarean Section.

Symphysiotomy does not compare favorably with its rival procedure in many particulars. It suffers by comparison in that it does not effect delivery, but merely prepares the way for it. The utility of symphysiotomy is limited by the very narrow range of obstruction with which it applies; cesarean section, on the other hand, insures delivery with equal facility and safety. Whatever the degree of disproportion, Charles Jawett, of Brooklyn, offers the following concluding remarks to an article in American Medicine:

Symphysiotomy is still a useful operation within a limited range of pelvic contraction.

It is suited to conditions in which only very little additional space is required for delivery.

It is a valuable resource, therefore, in cases in which forceps unexpectedly proves inadequate.

Axis traction forceps with the aid of posture should always be tried before resorting to symphysiotomy.

Its results would be much improved by restricting it to pelves with a conjugate of not less than 7.5 cm.—3 inches—in simple flattening or 9 cm., in general contraction.

Under equally favorable conditions its total mortality should be no greater than that of cesarean section.

When the pelvic space permits it should replace the cesarean operation in the presence of exhaustion,

It may be elected primarily as an alternative of cesarean section when the operator can be assured that the degree of obstruction is well within its safe limit. Here the choice of operation is a matter of individual preference.

Within its proper field symphysiotomy is better than cesarean section for an operator of little experience in abdominal surgery.

Mercury---Its Action Upon the System.

It has been said three of the most frequently used drugs were mercury, quinine and opium. Look at it from all standponts this may be true. The drug under discussion is an old one and its possibilities are many. The exact *modus operandi* by which mercury in any form produces such wonderful results has never been quite clearly understood, yet the most skeptical after watching the effects of a few doses of this drug upon the system cannot deny its wonderful curative properties. William Henry Porter, concluding an article in the Post Graduate says the principal actions of the mercurials are:

In summing up, it may be said that the principal actions of the mercurial are:

Stimulant to the hepatic cells.

Cholagogue in action by virtue of exciting hyper-secretion of the bile acids.

Sedative due to the two previous actions.

That is alterative, antiphlogistic, antisyphilitic, diuretic actions, etc., are secondary to the above actions.

That ptyalism from mercury is due to the inactivity of the hepatic cells, and to the salivary glands attempting to do what should have been done by the hepatic cells.

Medical Shock.

O. T. Osborne, (Journal American Medical Asssociation, Sept. 14 1901) thinks we are as justied fiin using the term "medical shock" as we are in using the term surgical shock, and that the symptoms of heart failure which develops so unexpectedly in acute cases progressing satisfactorly otherwise are due to this condition of shock. The symptoms are: A more or less rapid heart, but with the least movement or excitement made very rapid; a soft, irregular, perhaps dicrotic or intermittent pulse, incomplete inspiration without much actual dyspnea, interspersed with frequent sighs, and the subjective symptom of precordial oppression. The temperature is generally low, the flesh cool and clammy, and if quick relief is not obtained, death will soon take place, caused by heart failure or medical shock.

Like surgical shock he believes it to be a vaso-motor paralysis. As a consequence

of this paralysis, the major part of the blood is in the abdominal veins. The blood flows slowly into the dilated and, therefore non-elastic arterioles; hence, slowly in the capillaries, and returning slowly in the veins, but imperfectly fills the heart cavities. The heart, not only from imperfect fiilling, but also from impaired nutrition, contracts irregularly, incompletely, and arrhythmically. The aorta has not yet the pressure ahead or the forcible quota of blood from behind, and consequently does not give enough elastic rebound to force blood properly into the coronary arteries, and the heart muscle is improperly nourished. By the lowered pressure, and the normal blood pressure is so vital, all the functions of the body begin to fail, all digestive processs are imperfect, and undoubtedly normal oxygenation is impaired, molecular death begins to take place.

If medical shock occurs it is to be treated on the same general principles laid down for the treatment of surgical shock. All cardiac and vaso-motor medication should be administered hyodermatically, as the stomach will not absorb in this condition.

Spinal Surgery.

A. J. McCash, (Journal of the American Medical Association Sept. 7, 1901), makes the following suggestions as to technique:

1. The incision should be as high up as possible. The main reason for this is that the nutrition of the soft parts below the seat of lesion may be impaired because of destruction of the nutrive cells in cord. Another reason of less moment is that the lesion has generally been found above rather than below its point of location.

2. The operation should be done rapidly. But few vessels need the application of artery clamps and still fewer of ligatures. If a bold incjsion be made the bleeding will not be great and can be controlled by the use of gauze pads held down by broad retractors. At times it may be necessary to pack one side or end of the wound with sponges and while these remain for a minute or two the operator can work at some other part of the wound.

3. Ample space would be afforded for proper examination of the cord. For this purpose the removal of at least three laminæ generally necessary. Of course in case of fracture, bullet or stab wounds of the cord, the removal of one or two laminæ may suffice; but at least in case of tumor one should be careful not to be hampered by too small an opening.

4. Support after operation of the spinal column by means of braces or plaster-of-paris jackets has not seemed to the author necessary; indeed, it seems to add only to the discomfort of the patient. An experience of nearly twenty laminectomies has convinced him that it is generally useless.

There are two methods of operation for exposure of the spinal cord:

1. By means of a vertical incision through the skin down to the tips of the spinous process and then division and separation of the muscles attached to these until the posterior arch of the vertebral column is well exposed. The spines and laminæ are then removed by bone forceps and no effort made to save the fragments for replacement at the close of the operation.

2. By means of an osteoplastic flap consisting of skink, muscle, and the posterior arches of the vertebra, the flap if single remaining attached by a hinge situated at one or the other side or end, or if double the hinge being in the middle. The advantages of the first method are greater rapidity, less hemorrhage, and better access to cord. Its disadvantage is that because of removal of bone there must be left a gap in the posterior arch of the spinal column. The author does not place much value on this objection, as in the majority of cases no special weakness of the back results.

The advantage of the second method is that the bony flap is replaced and consequently the posterior bony arch is completely restored. Its disadvantages are that the operation takes more time, more blood is apt to be lost, access to the cord is less satisfactory and there is a liablity that the nerve roots may be irritated by resulting callus or imperfect adaption of the bony surfaces. The writer prefers the first method as a rule. He concludes:

1. The risk of the operation of laminectomy is slight.

2. Early operation is of the greatest importance. Operate before onset of degenerate changes.

3. In tumor cases do not waste time with antisyphilitic treatment.

4. Operate rapidly. Employ but few artery forceps or ligatures.

5. Support of the spinal column after the operation is generally unnecessary.

Neurasthenia—Its Treatment.

In a paper in the Interstate Medical Journal by Sanger Brown, the subject of neurasthenia in its many forms is considered. In regard to the treatment of this disease the writer is of the opinion that severe cases occuring in women, whether complicated with hysteria or not, are most successfully treated by a strict appreciation of the rest cure. Unless the patient consents for the

time being to become the subject of an absolute despotism no success can be hoped for. The writer states that a state something like mental hibernation should be encouraged, except that a prevalent air of cheerfulness and hopefulness must be ever present. He recommends rest in bed, milk diet for a few days until a "milk passage" is obtained, and presumably the alimentary tract is in condition for it, then forced feeding with massage and aloes to promote metabolism and elimination. It requires a great deal of technical skill both on the part of the physician and nurse for the maintenance of obedience and co-operation of the patient. In the treatment of this disease the physician at first should make daily visits. Women can adapt themselves to the rest cure much better than men. Men can almost never tolerate it in its purity. In women we find marked differences as to temperaments and early training in readiness with which they adopt themselves to the rest cure. When once a line of treatment has been determined upon it is absolutely necessary for the confidence and obedience of his patient. A great deal of outdoor exercise is insisted upon and a proper treatment of massage. Wheeling, golfing, a rough camp life or a trip on an Atlantic liner are usually very beneficial. Closing his article, the writer says:

The physician who, by prolonged observation and carefal study of a neurasthenic, correctly estimates his capacity and limitations, and by dint of patient pursuasion, education and eloquence induces him to adopt and adhere to a mode of life consistent with the fullest measure of success, comfort and happiness possible to him, earns and sometimes enjoys the grateful appreciation of his patient. He never receives compensation at all commensurate with the value of his services.

The Present Outbreak of Smallpox in America.

Dr. H. M. Bracken, Minnesota, in the Journal of the American Medical Association, outlined the origin and traced the course of many outbreaks in various parts of the State of Minnesota, with a total of 9,429 cases, and the disease has still many centers in that State. It is impossible to locate positively the source of the present widespread epidemic farther than that it spread from the Southern and Southwestern States into North Dakota, Minnesota, Nebraska and Montana. He suggested that it was probably imported into the United States by Cuban refugees before war broke out. Vaccine was frequently spoilt by not being kept in proper temperature, as it was frequently being shipped in cans which were too hot and subsequently kept in warm offices. The health commissioner of Minnesota kept all his vaccine in an ice-box, but, of course, not frozen, and had obtained good results. Replying to a question in regard to isolation, Dr. Bracken favored eighteen days' quarantine.

Some Observations on the Treatment of Hypertrophic Rhinitis.

This disease is growing quite common and its treatment should be looked after carefully. Chas. M. Robertson, in the Medical Age, after discussing the subject at length observes the following facts:

1. The utter uselessness of treating a growth of organized tissue in the nostril by the application of sprays and the galvano-cautery.

2. Where such growths exist treat as you would an overgrowth elsewhere.

3. Save all the venous sinus tissue possible and still secure breathing space enough.

4. The advantage of suprarenal capsule in nasal surgery.

5. The absence of danger of synecia forming, as they often do after the use of the galvano-cautery or caustic.

6. The use of dry pledgets of cotton and the disuse of all fluids.

7. The great advantage of the greased gauze as a surgical dressing in the nose over old methods.

8. The danger in the use of cocaine lessened by the use of the suprarenal capsule extract.

9. The disappearance of nasopharyngitis after the nose becomes ventilated.

The Hygienic and Mechanical Treatment of Heart Disease.

In two ways the heart, says Boardman Reed, in American Medicine, may be injured by the toxic products of improper digestion as well as by suboxidation and other faults of metabolism:

(1) Its muscle may be directly impaired by the circulating poisons, and at the same time be poorly nourished in common with all the other muscles, by the blood previously impoverished from the same cause; and (2) its work may be much increased by the contradiction of the arterioles resulting from the reaction of the alloxuric bodies and other products of imperfect metabolism.

He further states that for the prevention of threatened cardiac hypertrophy and the renal changes that so often accompany it, a suitable diet, not too nitrogenous, and an amount of careful, moderate exercise in the open air, sufficient to oxidize fully the food taken, are indispensable. It should be still

more important to regulate most carefully the diet and exercise where the heart and kidneys have already undergone pathologic changes from the irritation produced of an incomplete proteid catabolism. The uratic group of products of tissue metabolism has now been studied much more fully than the other leukomaines. Some of these catabolic products, while no less toxic than the xanthins, apparently act, to judge from clinical experience, in a different way, weakening the cardiac muscle and producing a rapid, irregular pulse with a tendency to degeneration or dilation, rather than hypertrophy of the heart.

Summing up his interesting article, he says:

Cardiac disease is often due to auto-intoxication, especially to poisoning by the alloxuric bases; cure or amelioration in such cases requires at first, in addition to an appropriate diet, not too nitrogenous, the utmost practicable rest of the crippled organ. The cardiac rest may be further promoted by very gentle exercises which dilate the capillaries without taxing the heart; the Nauheim method of treatment spares the heart by dilating the too contracted arterioles in two ways—(a) by stimulating the peripheral circulation through carbonated saline baths; and (b) by massage and forms of exercise so mild as not to quicken the pulse.

Is it Justifiable to Enucelate During the Acute Stage of Panophthalmitis.

In a recent paper by Edward Lander in Cleveland Medical Gazette several cases are given where as a result of an injury to the eye enucleation followed with success. There is a general opinion says the writer among the profession that it is somewhat dangerous to enucleate an eye during the acute stage of panophthalmitis on account of the liability to subsequent meningitis and death. That there is such a general opinion is not surprising, as the most experienced ophthalmologists are divided on this question. Probably, whatever risk may have attended enucleation in those cases has been due to the common practice of subsequently packing the orbit with sponge, lint, or absorbent cotton pads to check hemorrhage; and leaving these in position, under a pressure bandage, for twelve or twenty-four hours or even longer.

Closing his article the writer says:

In all cases of panophthalmitis in which the writer has done enucleation the results have been equally as good as those reported and those results, together with equally good results by others, confirmed his belief in the advisability of early enucleation during the acute stage of panophthalmitis

In concluding his paper, Mr. Marshall summarizes as fo'lows:

"1. Meningitis may be present for a certain time without there being sufficient symptoms to enable one to diagnose the disease.

"2. Meningitis has been known to follow other operations besides the excision of suppurating eyes, and cases are also recorded in which the excision of an eye which was not suppurating has been followed by death from meningitis.

"3. The changes seen in many cases indicate that the disease is of older standing than the symptoms would appear to indicate.

"4. Infection may occur at any time from an eye which is suppurating, and the longer the pus is shut up in the eye the greater is the risk, and the greater will be the absorption of the products of suppuration.

"5. There are two ways in which meningitis may arise: (a) By direct extension along the optic nerve and structures passing through the sphenoidal fissure; (b) by infective material being carried along the vessels.

"6. The sooner the pus is gotten rid of the better, and if it is thought undesirable to exercise the eye it should be at once opened, the contents completely removed, the sclerotic thoroughly scrubbed out, and both it and the surrounding parts rendered asceptic. Owing to there being no clear cornea to injure, a far stronger antiseptic may be employed than would be possible if a seeing eye were present.

"7. As the products of putrefaction may have soaked into the sclerotic and have infected the surrounding parts, it is far better to remove it; good drainage is then insured, and every piece of useless and suppuration tissue is removed."

Hot Drinks in Dyspepsia.

Chronic indigestion is sure, sooner or later, to be followed by disturbance of the motor apparatus of the digestive tract, usually affecting more particularly the stomach, which reacts less readily to stimulation. There results, says the Medical Press and Circular, a condition of impaired secretion, plus a greater or less degree of muscular atony, which must be combatted at an early stage if we wish to avoid an incurable degree of gastric dilatation. Among the remedies at our disposal hot drinks have, of late years, attained considerable vogue. The ingestion of tepid fluids exerts a marked sedative action on the gastric mucous

membrane and often relieves the painful sensations following meals in chronic dyspepsia. Less recognized, perhaps, is the influence of hot drinks on the motor functions of the stomach. In the ordinary course of events nothing remains in the stomach six hours after a meal, and the presence of alimentary debris after that period indicates the presence of some degree of muscular paresis. This condition of things may be greatly benefitted by the use of hot water with or immediately after meals; but in chronic cases permanent benefit can only be obtained by perseverance, the treatment being methodically carried out for some months. As might be anticipated, the hot water treatment does not ameliorate the secretory defects in the same degree as the muscular weakness, but by maintaining the stomach in a hygienic condition we may, at any rate, hope to check further degradation of the peptic glands, The temperature of hot drinks should be from 105 deg. to 110 deg. F., and their employment is especially indicated in cases of hyperacidity associated or not with some degree of gastric dilatation.

Tuberculosis a Preventable Disease.

Drs. Mooney and Emans, in the British Medical Journal July, 27, 1901, says that only a few decades ago the real nature of tuberculosis was unknown to us; it was regarded as a consequence, as the expression, so to speak of social misery, and, as this supposed cause could not be got rid of by simple means, people relied on the probable gradual improvement of social conditions, and did nothing. All this is altered now. We know that social misery does indeed go far to foster tuberculosis, but the real cause of the disease is a parasite—that is a visible and palpable enemy, which we can pursue and annihilate, just as we can pursue and annihilate other parasitic enemies of mankind.

Strickly speaking, the fact that tuberculosis is a preventable disease ought to have become clear as soon as the tubercle bacillus was discovered, and the properties of this parasite and the manner of its transmission became known. I may say that I, for my part, was aware of the full significance of this discovery from the first, and so will everybody have been who had convinced himself of the causal relation between tuberculosis and tubercle bacillus. But the strength of a small number of medical men was inadequate to the conflict with a disease so deeply rooted in our habits and customs. Such a conflict requires the co-operation of many, if possible of all medical men, shoulder to shoulder with the State and the whole population. But now the moment when such co-operation is possible seems to have come. I suppose there is hardly any medical man now who denies the parasitic nature of tuberculosis, and among the non-medical public, too, the knowledge of the nature of the disease has been widely propagated.

Another favorable circumstance is that success has recently been achieved in combating several parasitic diseases, and that we have learned from these examples how the conflict with pestilences is to be carried on.

Treatment of Delirium Tremens.

J. Frank Perry says (Medical Record) that he has failed to find a sovereign remedy, but has to vary drugs to suit the cases. The heart is sustained with strychnine and nitroglycerin, and possibly digitalis, strophanthus, sparteine, or cactus,grand. When the delirium tremens sets in the one purpose to be attained is to get the patient to sleep as soon as possible. Of the many popular remedies, chloral hydrate, alone or combined with the bromide of potassium, holds the first place. There is, however, a small number of persons for whom its use would be hazardous because of its depressing effect on the heart. The author uses small doses at intervals of from fifteen to thirty minutes. In some cases chloral is absolutely inert. Musk is efficacious, but very expensive. Apormorphine, hyoscine are fairly serviceable. The first can easily be pushed too far, but when intelligently used often acts admirably. Hyocsine is capable of injury and morphine is uncertain. When the delirious patient is once asleep he must not be disturbed, although he may not arouse for twelve or fifteen hours. When he wakes he must be treated by alcoholic substitutes (ammonia, camphor, hyoscyamus, valerian, capsicum, ginger, etc.,) and nourishment must be pushed to the utmost. At the end of twenty-four hours he will be literally a new man.

Tumors of the Bladder and Enlarged Prostate.

Wallace (Lancet, July 13, 1901) states that since the introduction of the cystoscope, diagnosis and prognosis in diseased conditions of the bladder have made enormous strides. With the use of this instrument negative and positive evidence as regards tumor of the bladder can be attained. Tumors of the bladder are classified as follows: (1) Simple papilloma and malignant epithelioma; (2) cysts. *Symptoms*: The usual first symptom is a causeless, symptomless bleeding with either bright red blood or dark blood, intimately mixed with

urine. There is no pain, the bleeding is intermittent, the urine between times being clear. It varies in amount, the quantity being no criterion of the size or nature of the growth. Later, when cystitis develops, pain and urinary frequency are complained of. The examination of the urine with the microscope gives generally negative results. The cystoscope gives invaluable evidence, and is best used at times when the urine is clear. *Prognosis* depends (1) upon the character of the tumor; (2) its extent, site and attachment, *i. e.*, whether pedunculated, sesile or infiltrating This is a most important point as regards prognosis; operative measures are always indicated. Suprapubic cystomy is to be employed in all cases, the bladder being distended with fluid, not with air. The tumor should be either snipped through or twisted and torn away gradually. Bleeding, as a rule, is not great, and usually ceases with hot water irrigations. *After Treatment*: Primary union should not be aimed at. Suprapubic drainage should be employed for ten days. There is no objection to the patient sitting up in bed within a day or two after the operation. In cases of enlarged prostate where catheter life fails to give the needed relief, the author advises prostatectomy and encleation of the hypertrophied masses, employing the suprapubic route.

The Treatment of Diphtheria Other Than With Antitoxin.

J. P. Crozer Griffith (Therapeutic Gazette, July 15) says in regard to prophylaxis:

Thorough isolation of those affected is important, as is the careful disinfection of everything which has been in close proximity with the patient. Not only so, but inviduals in any way concerned with the nursing of patients with diphtheria must come as little as possible into contact with others. Children of the family should be taken from the house whenever possible, and, further, themselves quarantined for a time—ten to fourteen days—lest they carry it to others. It is a matter of repeated observation that the germ of the disease can often be found in the throat of a healthy nurse caring for a case of diphtheria.

The nurse in attendance should wear, of course, wash dresses and a cap which thoroughly covers the hair. On leaving the room for her necessary outings, she must change her dress and disinfect her hands and face. The physician must never forget that he can himself readily become a source of danger to his other patients. Before he enters the sickroom he should cover his clothes with a garmet of rubber or linen and it is much better, too, if he can put on his head some such article as the oiled silk cap worn by women bathers at the seashore. On leaving he should wash his hands and face with a disinfectant, such as a solution of carbolic acid or lysol.

As in all infectious diseases, the room should be carefully selected in the upper part of the house, if possible opening into another room, best a bathroom. The windows of this anteroom should be kept open as much of the time as possible. All ingress to the sickroom should be through the anteroom, and the other door of the sickroom leading into the entry should be locked and the cracks stuffed with cotton or closed in some similar manner. It is commonly advised to hang a sheet moistened with a disinfecting fluid, such as carbolic acid or corrosive sublimate, at the door leading from the entry into the anteroom. All upholstered furniture, curtains, books, toys, etc., should be removed and the carpet taken up and replaced by old rugs or strips of carpeting which may be destroyed later. Pieces of old linen should be used in place of handkerchiefs and must be burned immediately. All the bed linen and personal linen of the patient should be soaked in a disinfectant solution in the anteroom before it is removed for washing. All excreta should be disinfected with a sublimate solution. The meals of the nurse should be carried to the door of the anteroom and there taken in by her. After using, the plates, forks and so on should be washed in a disinfectant, preferably carbolic acid, as bichloride will, of course, injure metal.

After the disease is over the patient must still be isolated for at least three weeks from the beginning of the attack. A still better method, where cultures can be taken is to continue isolation until the Klebs-Loffler bacilli can no longer be found in the throat.

Health Conditions in the Philippines.

Robert J. Sloan, M. D., of Shanghai, an American physician, has made a scientific investigation to determine whether the business of life insurance could be safely extended to the Philippine Archipelago, and the decision that it can is of great interest. (Journal of Medicine and Science.)

The climate of the Philippines is tropical in every part. It is a land of perpetual summer. The average shade temperature is 82 degrees Fahrenheit. The year is divided into three seasons—the rainy season, from July to September, during which the precipitation is usually about 100 inches; the cold season, from October to

January, and the hot season, from February to May, all inclusive. The normal range of temperature seems to be between 70 and 100 degrees Fahrenheit. The greatest drawback to the climate is liability to paroxysmal storms. The Philippines are the nursery, if not the birthplace, of typhoons, which there attain their maximum violence and render navigation in the waters of the archipelago extremely dangerous. Earthquakes are also frequent and destructive.

It does not appear that the Philippines are less salubrious than other tropical countries. They enjoy entire exemption from the curse of the West Indies, yellow fever. The endemic diseases of the Philippines are almost identical with those of the districts of Asia and Africa lying under the same parallel. They are the bubonic plague, Asiatic cholera, small-pox, beri-beri, leprosy, dysentery, and various forms of malarial fever. They do not, however, attack the white residents or the abstemious Chinese to such an extent as to be alarming. Tuberculosis obtains among the natives, but people living in comfortable circumstances seem to be fairly free from it.

The relatively high death rate of the islands is chiefly among the natives, and averages 36.24 in the thousand. In December last the estimated population of Manila was 300,000. The total deaths for the month were 905, principally; natives, 877; Chinese Mestizos, 20; Spanish, 3; English, 2; Roumanians, Italians, and Americans, 1 each.

Pyemia Following Suppuration of Bronchial Lymph Glands.

Schlagenhaufer reports (American Medicine) 3 interesting cases of pyemia following suppuration of bronchial lymph glands. The first was that of a woman of 21, who was brought into the hospital almost unconscious, with dyspnea, a rapid, weak pulse, and the signs of bronchitis. There was albuminuria, and the diazo reaction was positive. The temperature continued to rise; intense headache, stiffness of the neck, and vomiting set in. A diagnosis of tuberculous meningitis was made, but at the autopsy the following lesions were found: Purulent, basilar meningitis, and mestatic abscesses in the brain and spleen; tuberculosis of the apex of the right lung, of the bronchial lymph glands, and of the left kidney; and suppuration of a bronchial gland. This gland was situated behind the bifurcation of the trachea, and was not connected with any bronchus; but the mucous membrane of the right bronchus nearest the gland was a small necrotic and calcified gland. The second patient was a woman of 23, of whose history nothing was known. At the autopsy a suppurating broncial gland was found connected with the esophagus and the right bronchus. There were also basilar meningitis and multiple abscesses of the brain, one of which had ruptured into the fourth ventricle. In addition, a traction diverticulum of the esophagus and purulent bronchitis were found. The third patient was a girl of 17, who was brought into the hospital totally unconscious. At the autopsy a suppuriating bronchial gland was found communicating with the esophagus. There was also a traction diverticulum of the latter. The brain was the seat of multiple abscesses. As to the primary cause of the suppuration of the bronchial glands, tuberculosis could be demonstrated in all 3 cases. In all, the lesion in the lungs was slight. This, the author believes, favors the view of Ribbert that the lungs are not the first seat of tuberculosis, but that the disease primarily affects the bronchial and peritracheal lymph glands. In the first case, the brain abscesses were produced by streptococci; in the second, by streptococci and staphylococci; and in the third by streptococci. The cases are important in that they suggest careful examination of the bronchial lymph glands in so-called idiopathic brain abscesses and meningitis.

The Relation of Unbalanced Physical Development to Pubertal Morbidity as Shown by Physical Measurements.

From an interesting paper, in the Journal of the American Medical Association, W. S. Christopher draws the following conclusions:

1. There is an exaltation of life processes at the pubertal period which finds its expression not only in an increased rate of growth, but also in the development of physical power. This exaltation is preceded by a period of relative quiescence. In the sexes this exaltation differs in that it commences earlier and has a shorter duration in girls than in boys; moreover, it is more marked in girls than in boys in weight and stature, but less in measurements involving physical power.

2. Puberty is also a period of great individualization, as indicated by the great normal range of physical measurements at this period.

3. The range of physical measurements at all ages in childhood, including puberty, is distributed uniformly above and below the line of average measurements.

4. At puberty mortality is low and morbidity is high.

5. Neuroses, psychoses, neurasthenia, cardiopathies, deformities and anemias are the principal morbid manifestations of the physical, intellectual and emotional turmoil which characterizes puberty.

6. The great range at puberty of the measurements of the physical features of the child expresses the condition which permits the existence in individual children of unusual lack of balance in physical measurements, or maladjustment of physical features.

7. Unbalanced physical development is an important factor in the production of morbid manifestations. It is operative throughout the developmental period of life. It occurs with greatest frequency at puberty, and it there finds its most marked expressions. It is found associated, in a causal relation, with most of the morbid manifestations of puberty, particularly disturbed heart action, dilatation of the heart, fatigue, anemia, and some deformities, such as round shoulders and scoliosis, as well as many of the neuroses of the period.

The Diagnosis of the Presence of Bacillus Coli Communis by Means of Neutral Red.

William Hunter (British Medical Journal, Sept. 21, 1901).

Within the past few years a considerable amount of attention has been paid to the methods of distinguishing the bacillus coli communis from the bacillus typhosus. Of the many tests which have been proposed —as the milk test, the indol reaction, etc. —there is scarcely one which may not fail. Even the agglutination test is not always reliable.

Quite recently a good deal of attention has been directed to the use of colored media as a means of diagnosing between the bacillus coli communis and the bacillus typhosus. Many of the methods proposed have proved to be highly satisfactory. This is mainly due to the fact that the slightest change in the color of the tinted medium is easily recognisable. The majority of the earlier methods have all one great drawback—that is, they do not afford an opportunity of rapid diagnosis. Now, in the case of the bacillus typhosus and bacillus coli communis, it is usually important to give an early diagnosis, therefore colored media upon which these micro-organisms grow rapidly must be employed. Of these, the most valuable is that proposed by Rothberger in 1898. This investigator found that if small quantities of neutral red (in saturated watery solution), be added to tuber containing agar-agar, and these inoculated with the bacillus typhosus and the bacillus coli communis, a striking result is obtained. In the case of the tubes which have been inoculated with the bacillus coli communis, the neutral red agar becomes greenish yellow and fluorescent within twenty-four to thirty-six hours. In those which have been inoculated with the bacillus typhosus no change is produced in the medium.

During the past two years I have had frequent opportunity of studying the morphological and biological characteristics of the bacillus typhosus and the bacillus coli communis, and ultimately came to the conclusion that with the present methods it was scarcely possible to determine with certainty the presence of bacillus typhosus or bacillus coli communis in pure culture. The method proposed by Rothberger, however, appeared to me to be worthy of further study, and the results which I obtained I published in the Lancet of March 2nd, 1901. Since I commenced my experiments I have tested a large number of stains of bacillus typhosus and bacillus coli communis, and have always obtained absolutely constant results. Bacillus coli communis always produces a fluorescence and change of color of the neutral red media in twenty-four hours, the bacillus typhosus never.

At the same time the reaction cannot be regarded as specific. Other micro-organisms as bacillus tetani, B. œdematis maligni, bacillus proteus vulgaris, B. prodigiosus, etc., also give the reaction. This, however, does not affect the value of the reaction in regard to the diagnosis between bacillus typhosus and bacillus coli communis. So far all investigators are agreed that no strain of bacillus typhosus is able to affect the slightest change in color of the neutral red agar.

The conclusions which I feel justified in drawing are the following:

1. That the B. coli communis and a few other micro-organisms possess the power of reducing neutral red to a canary yellow fluorescent color.

2. That the B. typhosus never possesses this power of reduction.

3. That it is possible within twelve to twenty-four hours to diagnose with accuracy by means of neutral red, the typhoid group of micro-organisms from the true coli group.

Paget's Disease of the Vulva.

William Dubreuilh (British Medical Journal, Sept. 21, 1901).

Paget's disease of the nipple has sometimes been observed outside of the female breast, and several cases occurring on the male genitals have been published, but no

case of Paget's disease of the female genitals is on record. The following case is a faithful reproduction in a different spot of the disease as it occurs on the breast. It also offers an opportunity of ascertaining how the disease affects the mucous surfaces and mucous glands.

Mrs. B., aged 51, came to the hospital in September last complaining of an irritation of the vulva which began in the neighborhood of the clitoris and gradually spread.

State on Admission.—The anterior half of both labia majora, the clitoris and meatus are occupied by a large red and angry looking patch. The patch has a well-defined outline, it is hard, slightly swollen and raised, though not enough to alter the general shape of the region. Its surface is dark, red, excoriated, oozing, smooth and dotted with small white spots which are raised a little above the surface and appear as islands of thickened epidermis. There is no itching but occasional darting pains. There is a swollen lymphatic gland in the left groin. The whole patch was excised, and until now no recurrence has taken place. Microscopical examination shows the diseased patch to be devoid of its stratum corneum, except on the white spots mentioned above. The lower strata of the epidermis are deeply altered and present the appearance of an ordinary epithelioma which would be spread out on the surface of the skin instead of forming a tumor. In some parts are to be found small epitheliomatous nodules deeply imbedded in the skin, but it is easily ascertained that they are due to the spreading of the superficial alteration down into the hairy follicles of the labia majora or the mucous glands of the labia minora. The sudoriparous glands are everywhere sound, and nowhere has the epithelioma penetrated along their ducts.

The Nature of the Disease Known as Erythema Induratum Scrofulosorum.

Dr. Whitfield (British Medical Journal, Sept, 21, 1901) after alluding to Bazin's original description of the disease as occurring in young girls, proceeded to analyse some of the literature dealing with the pathology of the affection. He pointed out that two opinions, supported by histological findings, had been held. One maintained that the change was a necrosis associated with vascular changes, but with no granuloma resembling tubercle, the other that the disease was the result of a granuloma simulating tubercle if not actually tuberculous, with considerable affection of the vessels. He pointed out that in most cases of the former class the age of the patient was considerably greater than in the latter. Notes of two cases were then given which had recently been under Dr. Whitfeld's own care. The first case, which occurred in a girl aged 14 years, proved very obstinate to treatment, and showed a microscopical picture extremely suggestive of tubercle. The other was in a woman, aged 37, which yielded very rapidly to mere rest and elevation of the limb, and showed no structure at all of a granulomatous nature, but merely a phlebitis of small veins. In neither case was tuberculosis obtained by inoculation of a guinea-pig with the diseased tissue, though this had on more than one occasion occurred from cases of the granulomatous class.

He concluded by expressing the opinion that there were at present two diseases described under the same name, one of which was a tuberculosis of very slight severity, while the other had no relation to tuberculosis at all.

The Toxemia of Pregnancy.

S. Marx (Medical Record) concludes a very interesting article as follows:

1. Toxemia of pregnancy is a complex condition depending on more than one factor.

2. Many women go to term with albuminuria, without symptoms referable to a toxemia. When such symptoms arise, they are not caused by the albumin present, but by faulty urea secretion.

3. In the most desperate and malignant cases there is found neither albumin nor casts.

4. Urea is always found markedly diminished in the so-called true toxemias of pregnancy, or urinemias.

5. Finally, I make a strong plea for a regular and methodical course of urea estimation in all cases of toxemia, or for the relegation to secondary importance of the time-honored examination for albumin.

6. Progressive diminution of urea excretion, with or without albuminuria, is the sole indication for the induction of premature labor, which is especially indicated when conscientious medical treatment fails.

Albuminuria in Diseases of the Kidney in Infancy and Childhood.

J. R. Rathmell (Journal of the American Medical Association, Sept 7, 1901).

The nutritional disturbances lie in the epithelium lining of the glomeruli, the tufts of capillaries, and the uriniferous tubules.

1. Renal Congestion.—Active; chronic liver, heart, pregnancy; passive: tumors.

2. Definite Lesions of Kidney.—Toxemia, scarlet fever, gout, amyloid and fatty

degeneration, renal suppuration, renal tumors.

3. Indefinite Causes.—Scurvy, syphilis, medicinal poisoning, kidney, pregnancy of, epilepsy, tetanus, injuries to head, apoplexy, exophthalmic goiter.

4. Accidentals.—Pus: cystitis, pyelitis, urethritis; blood; pelvis, ureters, bladder.

5. Febrile.—Typhoid fever, smallpox, yellow fever, diphtheria, scarlet fever.

6. No Definite Lesions.—Functional, dietetic, intermittent, cyclic.

Albumin is found in the urine after a rich meal, heavy muscular exertion, intense emotion, or cold bathing.

A New Continued Fever.

E. J. Spratling, Forsyth, Ga., (New York Medical Record, Sept. 7, 1901) describes the symptoms of a new continued fever. He says the trouble begins with malaise for three or four days, then muscular pains, especially of the neck; there are slight chilly sensations, the temperature rises to 100 deg. or 102 deg., the pulse to 110 to 120, and respirations to 30 or 40; there are nausea, hacking cough, and mental depression. These symptoms increase in severity, the abdomen becomes sore and tympanitic, the urine scanty, offensive and high colored. Delirium may be present, the slightest noise or exertion causes exacerbation. In several cases the temperature reached 106.5 deg., in many not 100 deg. Rarely was more than one member of a family affected. The temperature was very susceptible to the action of antipyretics. The symptoms last from two to five days, and then give way rapidly, all discomfort disappearing. The erratic fever and scant urine persist for from three to ten days longer and were accompanied by frequent profuse sweats. The mental and physical lassitude persist in some cases for weeks. Out of sixty cases, one-half were slight, confining the patient to bed only two or three days. The complications in the order of frequency, were bronchitis, enteritis, laryngitis, pneumonia, pleurisy, arthritis, and lymphangitis.

Abnormal Stools in Infants.

Chapin (Journal American Medical Association) considers the following as abnormal types:

1. *Green Stools.*—Stools can be considered green only when that condition is evident immediately upon their passage. They are due to a fermentation, which is doubtless the result of bacterial action. All stools become green a certain time after passage, caused by oxidation of the air.

2. *Curdy Stools.*—Curdy lumps may be produced by undigested casein of fat. The former are hard and yellowish, while the latter are soft and smooth, like butter.

3. *Slimy Stools.*—These are the results of catarrhal inflammation. When the mucus is mixed with fecal matter, the irritation is high up in the bowels; but when flakes or masses of mucus are passed, the trouble is near the outlet.

4, *Yellow Stools.*—These are seen in depressed nervous conditions, especially in the hot days of summer, when the bowel is relaxed, and the inhibitory fibers of the splanchnic nerve do not act to advantage.

5. *Very Foul Stools.*—These are caused by decomposition of the albuminoid principles of the food.

6. *Profuse, Colorless, Watery Stools.*—Profuse, colorless, watery stools, with little fecal matter, are doubtless caused by an infective germ, akin to that of Asiatic cholera. This is known as cholera infantum.

It is rare to see one of these types by itself. With the exception of the last, they may be seen in all combinations.

Stereoagnosis.

Dr. C. W. Burr, (American Journal of Medical Science, March 1901), says the ability to recognize objects by handling them depends upon the integrity of the afferent nerves, the cortical deceptive area. Disease of either of these will make it impossible for the patient to recognize objects by handling them.

We may dismiss from consideration here the inability to recognize objects because of disease of the sensory nerves or of the sensory tracts in the spinal cord, medulla, and pons. Such inability is due to anesthesia of one or more types.

There is a distinct area of the cortex in which sensations produced by handling objects are grouped together to form tactile memory images, the tactile perceptive area, in the parietal lobe, which is not the same thing as the sensory area, though it may be located within the boundaries of the latter.

It would be well to limit the term stereaagnosis to cases in which the inability to recognize objects by contact is due to some failure of sensation caused by brain disease, either in the cortical sensory area itself or in the fibers going to it.

Tactile amnesia includes the case in which on account of disease in the tactile perceptive area, the tactile memory images are destroyed. It is not infrequently associated with mind-blindness, and, indeed, it is probable that always in recognizing objects by handling them we recall from memory a more or less faint recollection of the vis-

ual appearance of the object. Auditory memories are less frequently recalled because less frequently needed to make a complete percept, and those of smell and taste quite readily.

The form of sensation most necessary for the recognition of any given object depends upon the qualities of the object. Tactile anesthesia, if sensibility to stronger pressure is preserved, causes little or no difficulty. The space sense, the localizing sense, and the sense of positson are probably the most important, for by them we learn the form of objects—the most important element in recognition.

When in the cerebral palsies of children there is inability to recognize objects in the paralyzed hand, it is often caused, as Oppenheim states, by the fact that tactile memory images were never acquired.

Granting that the tactile perceptive area is not the same as the cortical sensory area, such cases as the second reported can be explained upon the hypothesis of a lesion cutting off the fibers joining the areas.

The Dilitation of the Cervix Uteri in Obstetric Practice.

Garrigues in American Medicine, thinks that to do a forceps operation in obstetric is often much more difficult and requires more skill than either cesarean section or symphysiotomy, and version and extraction are the acme of the obstetric art. The forceps should never be applied before the os is completely dilated. The dilation of the cervix is especially needed in the induction of premature labor; but the collaboration of nature is absolutely requisite and should be solicited. This may be done by tamponade, or by introduction of a bougie—the English bougie No. 10 being preferable. This may be followed by Barnes' dilators, their action, if necessary, being intensified by placing a colpeurynter in the vagina. In cases of placenta previa, eclampsia, threatened death of the fetus, or uterine hemorrhage, when desired to dilate the cervix as rapidly as possible, there are different resources, as manual dilation, dilatable bags filled with fluid, expanding metal dilators, and deep cervical incisions. Manual dilation is of great value, the best methods being that taught by Harris in 1894 and that by Bonnaire, of Paris, in 1897, either of which is preferable to pressure by the coneshaped hand. To the use of instruments for dilation the same principle applies as in manual dilation—namely, lateral pressure, even if it is exercised only on a few points of the circumference at a time, it is to be preferred to the pushing upward of large bodies in the direction of the cervical canal. By moving the rods of the dilators around to different parts of the cervix we obtain an even dilation and are less apt to tear the cervix and the parametria. The method of cervical incision can hardly be recommended when compared with bloodless dilation with hands or instruments. The deep incision may save a child's life, but it exposes the mother to immediate danger and remote suffering.

Sleep in the Treatment of Disease.

Dr. William Evart (British Medical Journal.

"Sleep has two offices, both fulfilled in the long sleep of the night, which it is our usual endeavor to secure for our patients—namely, that of favoring the slow changes of repair, and that of interrupting consciousness, by uncoupling the chain of neurons, or by relaxing protoplasmic tension or tone, The relief of tension is, it would seem, the only office performed by the shorter spells of sleep, and therefore the two forms of sleep suggest two therapeutic objects. The night's sleep, which comes without any drugs, may need to be bettered, and in improving the quality of spontaneous sleep, our help is often of value. It might also need to be prolonged.

"The systematic prolongation of sleep for the cure of disease in one of our opportunities hitherto little used. In chorea sleep entirely subdues the muscular agitation, and this observation has led to the attempt to arrest the disease by prolonging sleep for considerable periods. A complication arises in connection with alimentation, which in this disease, as in most other nervous troubles, is of primary importance. Partly for this reason, and because more than rest may be needed for a cure, the results hitherto reported have not sufficiently recommended the method.

"Prolonged narcosis has also been suggested in excessive wear and tear of the nervous system; and in various nervous affections, including the mental, its renewed trial, combined with suitable methods of feeding, might lead to encouraging results.

"Best suited, perhaps, to our everyday needs is a systematic resort to the shorter sleep. Like the light instalments of food which restore the lost function of appetite and digestion, short sleep in the day may be essential to the cure of nocturnal insomina. Our growing wealth in hypnotics warrants a hope that a suitable agent may yet be found which in that direction would minister to the health of the invalid, and might command the luxury of sleep at any opportune time for the convenience of the worker.

"Body rest as a systematic therapeutic agent has long found its place in our treatment for patients whom weakness alone, in the absence of medical advice, would not have compelled to take to their bed. To that class belong the frail women in whom the debility of anæmia, of dyspepsia, and over-fatigue develop symptoms often mistaken for hysteria. Rest in bed is their first need. In the treatment of chlorosis this is now recognized as the essential element for a rapid recovery. Its methodical employment forms an essential part of the open-air rest cure for phthisis, which, within quite recent years, has largely replaced at foreign sanatoria the previous method by mucular exercise."

The Radical Cure of Inguinal Hernia in Children.

Stiles, in American Medicine says that infants stand the operation remarkably well, and it has been his practice to operate although the child may be only a few months old. Should there be any trouble in keeping up the hernia.

Of his first 100 cases, the operation was performed in 14 under 6 months, in 9 between the sixth and twelfth month, in 56 during the second and third year, and in 21 during the third year. The anatomy of the parts concerned in hernia in children is such that the radical operation is not only simpler, but also less likely to be followed by recurrence than in the adult. The essential step in the operation in the child is the isolation and removal of the patent funicular process, its neck being ligatured at the level of the internal ring. The canal in children is so short that the internal ring is almost opposite the external ring, and this enables the operator by dragging down the isolated funicular process to apply a ligature to the neck without material injury to the aponeurotic and muscular structures of the abdominal wall. Stiles does practically Mitchell Bank's operation. The steps of the operation as he performs it are: (1) Exposure of the cord along with its covering and the pillars of the ring; (2) isolation, ligature, and excision of the funicular process: (3) closure of the ring; (4) suture of the wound.

Ring Worm.

This is an old word in our language, but it is by no means certain that it denoted the affection known to us by that name. In the Lane Lectures by Malcolm Morris, in the New York Medical Journal, this subject is dealt with quite extensively. He says:

My investigations have led me to the conclusion that there are at least two distinct fungi which may cause ringworm—one distinguishable by the smallness, the other by the relatively large size of its spores. In the former the spores are irregularly scattered about like the stones in a mosiac, and, as far as can be seen, they are disunited; interwoven with them is a felting of branching mycelium, the whole forming a sheath around the hair. The parasite eats its way into the hair and grows down toward the root; the hair becomes brittle and after a time breaks off, leving a short stump. The microsporon attacks the scalp chiefly, in children almost exclusively. The disease produced by this fungus is often very refractory to treatment and indefinite in duration. The large-spored fungus (*trichophyson*) first attacks the root of the hair and grows upward. The spores are arranged in regular chains intermingled with short, regularly-jointed mycelium; they lie around the hair, sometimes inside it, sometimes both inside and outside. The ringworm caused by this fungus yields more readily to treatment than that produced by the microsporon. The large-spored fungus attacks the body (*tinea circinata*) the region of the beard (*sycosis*), the nails (*onychomycosis*), and occasionally the scalp.

Light as a Curative Agent.

Extensive experimentation is going on regarding the curative effects of light. The old-fashioned solarium is again cropping into use. Sunshine and dry atmosphere are extolled in the treatment of tuberculosis, and lastly strong light in the laboratory (concentrated rays) are used for the same purpose. The Lancet, in a recent number, remarks that in our conscious superiority to our forefathers we have been used to look with contempt on their ways of treating cases of smallpox by means of red light in the form of red blinds, curtains and coverlets, but with our present knowledge of the chemical and physical action of the different rays of the spectum and the influence of light and darkness of life's highest and lowest manifestations, we may have felt a suspicion that whatever the theory of the medæval physician, their freaks may have had a scientific basis.

In a late number of the Zeitschrift fur Krankepflifi, we find that it has been tried and apparently with remarkable results in the treatment of measles. A child eight years old was stricken with measles. On the second day he was brought under the influence of red light. In three hours the rash disappeared, the fever subsided, and the child was apparently well, wanting daylight to play in. The red blinds were re-

moved and daylight admitted to the room, but in three hours thereafter the medical man was again summoned and found the rash and fever had returned and the child was weak and prostrate. The red light was again resumed, the rash again disappeared in a little over two hours as did the fever, this time permanently.

Rheumatoid Arthritis.

G, L. Bailey (Cincinnati Lancet-Clinic) considers this disease under the following heads.

(1) Heberden,s nodosities, the mildest form of the disease, consisting of small osseous tubercles on the lower extremity of the dorsal aspect of the second phalanges of the fingers and possibly the toes. Other joints of the hands and feet may also be affected. This is generally a local condition, but may be the beginning of the general progressive form.

(2) Partial or mono-articular rheumatoid arthritis affecting one or a few joints, and producing similar changes to a more serious degree than the preceding form, as seen in morbus coxæ senilis. Foreign bodies may develop within the joint, but visceral complications are rare.

(3) Chronic progressive form. This is the gravest form of the disease, and although exhibititing a preference for the smaller joints, may involve any or all of the larger ones, affecting the muscles, nerves and adjacent structures, and may, according to Charcot, involve the viscera. The local changes are mainly those of a dry arthritis.

Syphilis D'Emblee Witout Primary Sore.

Dr. Louis Jullien, of Paris, has recorded two extremely interesting cases of syphilis accidentally contracted by a surgeon and his assistant in the course of an operation, (British Medical Journal, Sept. 21, 1901). The details are shortly as follows:

On June 9th, 1899, they removed a tuberculous growth, situated over the sternum, in a woman aged 32. The needle used for suturing the wound did not act well, and the surgeon in drawing it through, cut himself badly about the end of the right forefinger. The needle was two-edged, so the wound inflicted by it was deep and bled a good deal. The assistant then tried to pull the needle through, and in doing so injured his right forefinger in exactly the same way. In both cases the wounds healed in three or four days. The patient was dressed for the first time on June 17th. There was slight ulceration and redness about the points of entry and exit of the stitches. This led to a suspicion of syphilis. On the following day a macular syphilide developed, and, on examination of the genitalia, an involuting sore was found about the fourchette with some inguinal adenitis. On July 5th—twenty-six days after the infliction of the wound—the surgeon was suddenly seized with febrile symptoms and remained in bed for twenty-four hours with a temperature of 39 deg. C. (nearly 103 deg. F.), The end of the injured forefinger became swollen and the wound broke down superficially, giving rise to a very insignificant amount of ulceration. On July 9th—thirtieth day—a confluent macular syphilide appeared, followed on the 16th by moist papules on the scrotum, and on the 18th by mucous plagues on the finger. This was accompanied by joint pains which lasted to the end of July. On July 26th a papular syphilide developed on the palms. The assistant remained well until July 9th (thirtieth day after the accident), when he had a febrile attack. There was no reaction at the site of the wound. A macular syphilide made its appearance on the thirty-third day. The conclusion to be drawn from the above are of scientific as well as practical interest. The facts confirm Pellizzar's experiments that the blood of syphilitics is infectious although it is not known exactly at what time it becomes so. In this instance the blood of the woman was certainly infectious nine days before the secondary eruption. The primary sore in the woman was probably about thirty days old. Another point of perhaps greater interest is the fact that the syphilitic virus was directly introduced into the blood of the surgeon and his assistant *d'emblee*—that is, immediately—without going through the usual stages of primary sore and lymphatic infection. The latter stage was skipped, the glandular barriers avoided and the organism taken as it were by sudden assault and surprise. It should be mentioned that the lymphatic glands corresponding to the wounds were not enlarged. Adenitis occurred only after the secondary manifestations as a result of involvement of the membrane. This mode of invasion was some time ago theoretically discussed by Prof. Olteramare, of Geneva. The two cases here recorded are a clinical confirmation of those *a prirori* views. The practical lesson conveyed is also an important one, and demonstrates once again how careful surgeons should be to avoid wounds in the course of operations. Had the French surgeon pulled the needle through by grasping it with some kind of forceps, unpleasant consequences would have been avoided. Now, as to the expression *d'emblee* used by French writers the foregoing details offer a sufficient ex-

planation of what is meant: To develop without the usual preliminary stages (as in mycosis fungoides *d'emblee*, for instance), to take by assault and surprise. Littre derives it from *involare*.

Thoracentesis--Its Indications, Technique and Accidents.

A. P. Heineck (Medical Standard, September, 1901,) gives a condensed and instructive article, Indications: 1. In serofibrinous pleurisy. (a) When life is threatened or endangered by asphyxia from compression, or by cardiac weakness. Dyspnea alone is not an imperative indication. (b) When the effusion reaches half way up one side of the thorax, if it be undiminished by medical treatment persistently applied for three or four weeks. (c) In effusions of lesser size when stationary. (d) In all pleural effusions which by their abundance threaten the patient with asphyxia as in those due to malignant tumors, etc.

2. Hydrothorax, dependent on cardiac or renal disease, when excessive. The withdrawal of the fluid has to be repeated at frequent intervals.

3. As an aid to diagnosis in pleural effusions of doubtful nature, especially in children.

4. In tubercular serous effusions.

5. In certain cases of empyema.

6. Hemothorax. In this condition it must not be undertaken until sufficient time has elapsed to permit of thrombosis of wounded vessels.

Technique. 1. Thorough cleansing of the field, the surgeon's hands and instruments.

2. Local anesthesia with 3 per cent. cocain. General anesthesia is never indicated.

3. If the patient is not too weak let him assume the sitting posture.

4. Point of insertion varies with different operators. Dieulafoy selects the eighth interspace at a point corresponding to the lower angle of the scapula. At the Cook County Hospital the needle is usually inserted at the sixth interspace a little anterior to the posterior axillary line. The fluid may not at once flow out; this may be due to: (a) The receiving bottle has not been sufficiently exhausted, or, the bottle not being well closed, vacuum has disappeared. (b) The aspirating needle may be clogged by a fibrinous mass or masses. (c) The needle is stuck in the lung parenchyma, or has not perforated the parietal pleura- (d) Mistake in diagnosis.

5. Removal of fluid must be gradual. If too rapid it may cause:

(a) Pulmonary edema of the compressed and of the opposite lung. (b) Cerebral anemia and syncope, due to withdrawal of accustomed pressure on heart and to rapid afflux of blood to the expanded lung. (c) Pulmonary embolism (rare).

After a sufficient quantity of fluid has been withdrawn remove needle and seal wound with aseptic cotton and 10 per cent. iodoform collodion. Apply a wide bandage snugly encircling the chest. This bandage compresses the thoracic cage, limits its amplication, and by considerably restricting the expansive action of the ribs gives the patient a sense of well-being. After thoracentesis, patient is to be confined to bed for twenty-four hours.

Dangers. 1. Wounding of the intercostal vessels. Rare, as they lie in a groove running along the lower border of the rib.

2. Puncture of the rib.

3. Puncture of the pericardium. Will not occur if the needle is inserted in the mid-axillary line.

4. Puncture of diaphragm. Do not go too low.

5. Rapid reproduction of the effusion. Use catharsis and other depletory measures to prevent.

6. Emboli, released by expansion of the lung.

7. Great pain. Suspend aspiration temporarily.

8. Cough, due to wounding of costal pleura. Withdraw needle if it shows no tendency to stop.

9. Purulent transformation of serous transudate. This is due to defective asepsis.

10. Convulsions may occur after aspiration, due to reflex action, or minute emboli in the cerebral arteries.

11. Cardiac syncope, due to cerebral anemia. Stop aspiration, lower patient's head, stimulate.

12. Cerebral anemia.

13. Puncture of the lung. Not ordinarily serious. Will not usually cause pneumothorax.

14. Hemothorax, due to violent removal of fluid and consequent rupture of vessels.

15. Edema of the lung. Often fatal. It is due to too rapidly and too thoroughly evacuating the pleural cavity.

Some Points in the Management of Eczema.

Henry Waldo, (British Medical Journal, Sept. 21, 1901):

Eczema should always be treated, and no attention should be paid to the doubts expressed by some as to injurious constitutional effects arising as a consequence of its cure, these are relics of the ignorance of the Middle ages. To keep the part affected scrupulously clean would seem to be an im-

portant point. And especially is this the case if it be true that the majority of cases of eczema depend upon the action of micro-organisms. Kaposi, however, is not of this opinion, as he says that it is of the utmost importance to realize the fact that the basis of eczema is inflammation of the superficial layer of the skin, and that the various lesions occurring in its course—papules, vesicles, crusts, etc.—are merely the outcome of such inflammation. And, furthermore, he says that eczema may be provoked at will in any part of the skin of any person by mechanical, chemical, or thermal stimuli. And he considers that this fact is strongly opposed to the theories of the parasitic origin of the disease Nevertheless the eczematous part must be washed in some way. For although no single parasite has yet been recognized as present in all forms of the disease and as capable of inducing eczema when intentionally transmitted from one individual to another, yet a large number of micro-organisms can always be recognized upon an eczematous surface. Neither plain water nor soap, however, must be used. The harm done in many cases by using water is by allowing it to evaporate and so to produce cold, the resisting power of the tissues being at a low ebb. But it sometimes seem under any circumstances to act as an irritant and it is a safer plan to cleanse the part with rain water, with the juice of bran, or starch or boiled oatmeal once every twenty-four hours. Immediately drying with a soft towel is recommended. The addition of a drachm of bicarbonate or biborate of soda to the pint is useful if there is much exudation in the form of crust. Some antiseptic fluid may also be added with advantage. This washing should be undertaken by an attendant, as an important point in treating eczema is to ensure rest to the part. The sound parts of the skin should be washed daily with soap and water. By doing so the eczematous surface is much benefitted. If an eczema is present on both arms or both legs and it is decided to apply different applications to each limb it must not be taken as a test of the relative value of the two agents, as one side always responds to a successful treatment of the other. It follows that a very important point is to clean and polish the general surface of the body which is not the seat of disease, and so to take this sympathetic relation of the two sides of the body into account. The eczematous surface should always be protected by some application. I do not think the kind of application is so important as the protection of the part. If the attack is acute apply soothing remedies. If stimulating applications are indicated paint them on once or twice a day only. In the local treatment of chronic eczema begin by removing all crusts. When much exudation is present an oily covering acts well in removing it. If a parasiticide is thought necessary it must be one that does not irritate. To a wet eczema it is often better to apply lotions as in this way the local remedy is enabled to come into close contact with the living tissues.

I have purposely spoken of local treatment first because it is considered to be by far the most important. But internal treatment must not be ignored. As Bulkley says; "No one can rightly deny the power of micro-organisms to produce disease, for the results of aseptic surgery are incontrovertible, but there is great danger in connection with diseases of the skin lest local pathology lead to a neglect of the more important consideration of the soil on which the germs flourish." A striking illustration, he thinks, of the bearing of this remark is found in the change of opinion which has come over the medical world in regard to the relative importance of attention to the microbe in tuberculosis, as compared with the more important elements of the nutrition and hygienic condition of the patient. He thinks this points once more to the wisdom of the precept that it is often the patient who is to be treated rather than the disease by a specific name. Buckley advocates the taking of milk in eczema, especially in neurotic eczema, and says the results will often be very striking. He considers it very important that the milk should be taken between meals. I have ordered warm milk for years in suitable cases, but I consider it should always be taken with meals. The stomach requires rest, and the only thing permissible between meals, in my opinion, is water. Singularly enough Hutchinson, some years ago thought that milk produced eczema. In many cases of eczema I find blue pill very useful. Aperients play an important part in the internal treatment of many cases, and especially is this the case if the local disease is due to gout. This influence in eczema has been strongly contested by some authors; but Hyde, of Chicago, says the importance of gout as a factor, at least in eczema of the genital region, scarcely can be overestimated. Quinine is sometimes valuable as, in addition to its other qualities, it has some control over pruritus.

If auto-intoxication is suspected I know of no better intestinal antisetic than benzonaphthol, which is odorless and tasteless.

Alcoholic beverages often aggravate eczema if it is at all acute. But in its chronic forms Dr. Pye-Smith considers that red

wine taken with meals, and still more porter, or, if this is not well borne, one of the lighter kinds of ale, is not only harmless but useful. He also says that for the marasmus we sometimes see along with general eczema in young children there is no drug so valuable as brandy. I think all alcohols increase the itching which is often such a troublesome symptom. The majority of writers consider that alcohol if taken at all in any stage of eczema should be taken most sparingly.

In some forms of eczema a microbicide taken internally appears to assist in the treatment. Salicin is sometimes given with this idea.

The effect of diet upon eczema has been much discussed. Dr. Pye-Smith considers that "dieting" has been carried to an extreme and often a ridiculous minuteness. He believes excessive quantity of food and imperfect mastication are much more important causes of illness than special quality. He thinks that what most people eat is for most people wholesome, and a natural appetite finds appetising seldom disagrees. He further says that some kinds of eczema are certainly better for restriction of animal diet. I believe with dietetics, as with drugs the idiosyncrasy of the individual is a real and perplexing difficulty. As Dr. Walter Smith says: In very many cases an intelligent and temperate patient knows, or ought to know, better than his doctor what suits him and what aggravates his complaint. Sir Williams Roberts's rule of conduct is worth remembering, namely, it may be regarded as certain that any food accessory, the use of which is followed by a sense of discomfort, is not beneficial to that individual.

It is a rule among dermatologistst to discourage patients from going to the sea sea when their eczema if at all acute, and I think it is generally a good rule. Hyde, of Chicago, says, as a rule, a residence in countries lying near the seashore is favorable for persons who have contracted an eczema in the inland territories, as the climate of the seaboard is greatly influenced by proximity to the ocean. He also thinks the Alps, in Switzerland, furnish climatic conditions unfavorable for eczematous subjects in consequence of the attenuation of the air, and the direct action of the sun upon the skin.

The clothing of the eczematous patient is a matter of great importance. Woollen underclothing may be too irritating, and it is often well to advise silk, muslin, or linen undergarments be worn next the skin. These are the chief points which have occurred to me in the management of eczema.

The Pathology of Exophthalmic Goitre.

Walter Edmunds, (The British Medical Journal, Sept. 21, 1901): Whether the causation of Graves's disease is primarily in the nervous system or in the thyroid there can be no doubt that the abnormalities, wherever they may be, are of a chemical nature. The starting point of the changes which follow excision of the thyroid and parathyroids is in all probability the loss of the secretion of these organs, and as the symptoms are mainly in connection with the nervous system we must consider that the secretions have much to do with the nutrition of the central nervous system. This is, in fact, the conclusion at which Sir John Simon arrived from his observations, made now more than fifty years ago.

I have recently been making some experiments with a view of determining the nature of the changes in the central nervous system caused by total excision of the thyroid and parathyroids. The observations are not yet complete, but the announcement of Professor Gley's interesting communication has tempted me to make them the subject of a preliminary communication.

The experiments were made on dogs; altogether on eight. In four the thyroids and parathyroids were all excised at the first operation; in four the total excision was done in two stages with an interval between. In all the cases dealt with the usual well-known symptoms followed the complete (or completing) operation within a few days.

The cord and medulla, and in one case also a portion of the brain, were preserved in methylated spirit or formalin and methylated spirit.

In order to have the advantage of Dr. Mott's experience and kind assistance, the material was with his permission taken to the pathological laboratory of Claybury Asylum, and the examination of it made there. The specimens were embedded in paraffin, cut and stained, mostly by Nissl's method.

Examination of the specimens showed in all the emperiments the same changes, varying in degree, but in the most marked specimens there were profound changes.

The Nissl "bodies" were no longer defined; the substance sometimes appeared as fine dust, and sometimes the chromophilous elements seemed fused together, and had in fact undergone "chromatolysis"; sometimes the substance in the cells, in specimens which had been properly prepared, took the stain too deeply. In some of the cells the chromophilous substance was absent, only the network within the cells being visible; in some of the cells there was considerable swelling of the nucleus; of

some of the cells the processes were wanting, and in fact, cells might be found in every stage of destruction.

These changes are very similar to those described by Dr. Mott in his Croonian Lectures last year as occuring in some forms of acute poisoning; in fact, it appears that athyroidea is a form of acute poisoning affecting the central nervous system. From the fact that the acute nervous symptoms can be produced by the excision of the parathyroids alone, and as a rule only myxœdema, or not even that, by the excision of the thyroid alone, it seems probable that the absence of the parathyroid secretion is in some way the cause of the acute symptoms, and, from the nature of the changes in the cells, it seems that it acts by its presence being necessary to the extraction from the blood and deposition in the cells of the Nissl bodies, which are supposed to be the food of the cells; Dr. Gley having shown us that there is a large amount of iodine in the parathyroids, it is natural to suppose that iodine plays an important part in these chemical reactions.

In Graves's disease the colloid of the enlarged thyroid resembles that of the "compensating" hypertrophy of the thyroid of experiments in not staining so deeply as does normal colloid; it has, in fact, undergone a chemical change. As to the pathology of Graves's disease. its symptoms so much more resemble the nervous symptoms following excision of the parathyroids than myxœdema, which we know to be due to defect of the thyroid proper, that suggests itself that Graves's disease is due to partial aparathyroidea, and it would be desirable that those who may have the opportunity of making necropsies in cases of Graves's disease should especially examine the parathyroids.

The Leading Editorials of the Month

The Psychology of Assassination.

The editor of the Medical Press and Circular, Sept. 18 1901, in his leading editorial refers to President McKinley's assassination. The sentiment he manifest, and his style is beautiful. He says: The assassin—the executive apostle of anarchy—has again been busy among the most prominent, if not the most "truly great" ones of the earth. The selection of the latest victim of the levelling-down principal presents a new feature of most striking philosophical, as well as political and social, interest, inasmuch as President McKinley was the beloved and admired leader of the more advanced party of the most advanced and most expanded democracy that the world has yet seen. It is another of the terribly instructive incidents which must make the unprejudiced observer seriously doubt the success of the great experiment of "government of the people by the people for the people," of which another of its pilots, and subsequent victims, used to speak so exultingly. It furnishes another item of proof of what has probably always been evident to thinking men, at least to that section not actively engaged in politics, that every system of government devised by man must be strongly tinted with the hues of human weakness. Another startling example of the meeting of extreme in all our terrestrial affairs is offered by the fact, which the history of the last quarter of a century goes to prove, that the respective heads of the absolute despotism of Russia and of the unlimited democracy of the United States of America occupy the most unsafe positions of any public men. The ingenuity expended upon the preparation of weapons of destruction has also contributed to increase the danger of a prospective victim to popular hatred or indignation. The death-dealing revolver can effect the object of its owner, where the stiletto or bodkin could not. And a more widely-diffused knowledge of the structure of the human body is utilized by the educated murderer of the present age to minimize the chances of failure of his deadly design. For the "penknife scratch" of the weak-minded and weak-bodied Ravaillac, the nineteenth century substituted the carefully rehearsed dagger-thrust of Karl Ludwig Sand. This latter politico-religious enthusiast had meditated his act a whole year before its execution, continually prayed for the assistance of God in carrying it out, and died exultingly "for his own convictions" fourteen months after its perpetration. During the year of incubation of his design he had frequently attended anatomical demonstrations in order to make sure of the position of the heart, wrote the most affectionate letters to his parents, was a most lovable companion to his fellow students—who objected to him only on the score that he was always trying to improve their morals and elevate their religious sentiments—and while under sentence of death always stated with calm dignity that he only "did what it was his duty to do." Although we learn from the pages of Holy Writ that the Jews of ancient times emphasized the importance of smiting an enemy under the fifth rib, this evident aim at the seat of cardiac impulse does not display the appalling subtlety of skill displayed by the assassin of the Empress of Austria, who planted

his deadly weapon a step higher and a step nearer to the breast-bone. The thickness of the left ventricular wall may render the infliction of a wound "beneath the fifth rib" comparatively trivial. Wounds of the heart—ususally so rapidly fatal—are by no means necessarily so, as popular faith assumes. We have long adopted a triple classification of wounds of the central organ of circulation: (1) *non penetrating*, (2) those so small as to deserve the name of *self-closing* or *collapsing*, such as needle-thrusts, and (3) *valvular*, which pass so obliquely through the cardiac wall as to be closed by muscular action during systole, and by the pressure of the blood from within during diastole. The thinness of the wall of either auricle almost excludes the first and third of these groups, and the choice of the assassin's weapon practically always excludes the second. These facts explains the much smaller recovery-rate in cases of wounds situated at the base of the heart. Even suicides do not usually employ needles, and this fact, combined with the others above stated, goes far to justify strong scientific scepticisim regarding the description furnished by the "authorities" concerned regarding the death of Admiral Villeneuve. Even Karl Ludwig Sand missed his own heart, although he had been so successful in his experiment on Kotzbue Death in cases of wounds of the heart is, of course, in the vast majority of cases, not due to hæmorrhage in the ordinary way, but to the mechanical obstruction offered to the movements of the organ by the blood which has escaped into the pericardium. In this connection the wound and consequent symptoms in the case of the late Empress of Austria furnished what may be looked upon as a typical experiment. There can be little doubt that the assassin of President McKinley also aimed at the heart, "in a general way," in his first shot, and, less definitely, in the second. The penetration of the stomach—before the days of the antiseptic revolution—almost as surely fatal as that of the heart itself, only much more slow, and infinitely more painful—has, accordingly, been substituted. But, even now the advantages of asepsis and anæsthesia cannot wholly neutralise the effects of a prolonged abdominal operation upon a patient already in a state of complete collapse. Then the use of the Rontgen rays, although giving in so many cases a gratifying confidence in the search for an imprisoned bullet, retains, in such a case as the one now before us, the very serious element of danger from prolonged exposure in various positions of the body. And behind the whole history of such deplorable cases lurks the moral of the "Vanity of Human Wishes," the hitherto complete failure of establishing upon earth a reign of complete "Peace among men." Poverty misery, and discontent will as surely be met with in the most advanced democracy as in the most absolute monarchy. So will their consequences, physical and moral. The materialism and utilitarianism of the present age have aimed, and with a considerable amount of success, at stamping out all the higher emotions, as their features and results were visionary and unpractical. Superstition and even faith were to be extinuished, as enemies to reason and physical truth. The frequently unsatisfactory results of medicine and surgery drew off the confidence of that advanced section of the community which must see and feel everything before leaving. Passion of every kind must be eliminated; emotion must be absolutely controlled; faith must submit to physical tests. This programme has been worked with increasing demonstrativeness during the last half century, and the opening of the twentieth century has at least shown that, with the rapid growth of physical science and the daily inroads on the mysteries of nature, the human race as a whole is still unsatisfied, while its most advanced and most materialistic sections are probably the most miserable of all. The emotional longings for higher things than those of earth will not be exterminated; the hankering after the mysterious and the unattainable—in fact the human characteristics which most truly distinguish man from brute—are still living in the hmman heart. Their volcanic explosions assume forms ridiculous, preposterous, insane, and even criminal. Medical men should recognise the position and contribute what they can to the education of the public. It is of greater interest and importance to them than to most sections of the community to keep continuously in touch with the advanced guard of thought. Unsatisfied longings and disappointed hopes have on one side created a cosmopolitan brotherhood of Anarchists; on the other a crusade of Christian Science healers.

Raw Meat and Meat Juice in Tuberculosis.

The International Medical Magazine devotes its leading editorial to this subject It says:

A writer in the Klinisch-Therapeutische Wochenschrift, of July 28th, call attention anew to the claims made for raw meat juice as a specific remedy in this disease. It has often been noted by keen observers that there is a kind of antagonism between gout and tuberculosis. Gouty or even li-

themic patients almost never become tuberculous—at least not till there has occurred a change in their constitution and they have ceased to be lithemic. A meat diet tends to favor lithemia and therefore, *a priori*, should protect to some extent against tuberbulosis. Richet and Henricourt some time ago carried out series of experiments on animals which seemed to prove that raw meat especially or the juice expressed from it—cooked meat did not act the same—is not only prophylactic against tuberculosis but exerts a remarkable curative power over animals infected with it. Richet first inoculated six dogs with tubercular bacilli and let four of them die. The two others, after becoming greatly emaciated from the disease thus produced, were fed on the juice pressed out of raw meat, whereupon they recovered their flesh and survived. Richet and Henricourt in connection later performed similar experiments upon a number of dogs with the result that those fed in the usual way all died in four to five weeks while those fed on raw meat lived from three hundred days to two and a half years and a part of the dogs were still living at the time of the publication of the report.

Dr. Hónig of Budapest, the writer of the paper in the German journal above mentioned, reports having made a trial of this method in his practice, and though he does not agree with the Frenchmen that the raw meat exerts a specific curative influence analogous to that of thyroid extract in appropriate cases, he concedes that "we have in the meat juice a dietetic remedy which, regarding its nutritive value, its effectiveness and its relatively low cost of production, is the food preparation to be preferred." Then after question the claims of its specific properties he adds: "Nevertheless zomotherapy can be recommended as an easily employed adjuvant of the usual hygienic-dietetic treatment."

Hónig reports two cases of well-marked tuberculous patients fed on raw meat and meat juice while being treated otherwise by numerous drugs, including codein and antimony, and both were greatly improved in their general condition, gaining rapidly in strength and weight but without any corresponding improvement in the pulmonary lesions. One of them, a girl of seventeen, who had dullness at one apex, entire loss of appetite, a severe cough and of blood, gained over sixteen pounds during the treatment of eight weeks, which would seem to an unprejudiced physician pretty strong evidenceo f curative value in the method, even if it did not in that short time remove the tuberculous deposit in the lungs.

Typhoid Infection in Armies.

The following leading editorial appeared in the British Medical Journal Aug. 24, 1901:

In a paper contributed to the Navy, Army, and Ambulance Section on Airborne Typhoid in Armies, which appears at p 463, Dr. Leigh Canney has endeavored to show that in those epidemics of typhoid fever occurring at certain military stations in India, namely, Kailana, Quetta, Khyber, Chakrata, Bangalore, Mhow, and Poona, where dust and flies have been believed to have been prominent factors in the spread of the disease, the evidence of such a causation was by no means clear, and that the avenues of infection by means of water were not all excluded in a single instance. Of these, the outbreak in Quetta in 1898, the causes of which were made the subject of inquiry by a Commission, is more fully discussed by Dr. Canney than the others. The Commission on the spot concluded that dust was the more important means of propagating the disease, but Dr. Canney, from a study of Blue Books, has come to the conclusion that the balance of evidence is in favor of the waterborne theory. It is unnecessary to analyse in detail the arguments advanced by Dr. Canney in support of his case as against that of the Commission, or to make a minute examination of the similar reasoning which he applies to epidemics in our army in Egypt and South Africa. It will suffice to say that his conclusion is, "if the water avenues to armies are protected, all other agencies are powerless to spread typhoid in armies," and, including the lesser in the greater, we must add in civil communities also. Dr. Washbourne, who discussed the paper, while agreeing that epidemics of typhoid fever were waterborne and not airborne, thought that in individual cases infection was by other channels. Lieutenant-Colonel Giles, of the Indian Medical Service, however, while admitting the importance of water carriage, maintained that flies and dust were a quite frequent cause of infection, and that in certain outbreaks water infection must be placed out of court.

It is probable that no one will at the present time be found to deny that most of the outbreaks of typhoid fever among civilized communities—of which that at Maidstone, alluded to by Dr. Washburn, may be taken as a type—are waterborne, although it is a matter for thought that the typhoid bacillus was never isolated from the Maidstone water; but it is also probable that many will be found to uphold the view that outbreaks of typhoid in armies on active service, of which those occurring in the

Spanish-American war and in the South African war may be taken as types, are in large part due to the spread of infection through the air, that is, by the agency of dust and flies.

The following chain of events is within our own knowledge: Of several surgical officers attached to one of the civil hospitals in South Africa, one, of high training and considerable professional standing, determined that whatever happened to him he at any rate would not contract typhoid fever from drinking unboiled water. He accordingly had boiled every drop of water he drank or took into his mouth, including that he used for washing his teeth. But again and again dust from the track of the army was blown in quantity into his mouth and nose, and, whether or not on that account, he developed typhoid fever. This is a small piece of positive evidence, and if authenticated cases such as this were numerous enough there would result the proof of an outbreak of typhoid fever not due to waterborne infection.

It is worthy of remark that at the present time, when the carriage of tubercle bacilli in powdered sputum by the air is believed to be the main source of infection of that common disease, pulmonary tuberculosis, a similar mechanism in regard to typhoid fever should by some be almost scouted, although as Neisser has shown, that typhoid bacilli can be carried by strong currents of air.

The only laboratory experiment that need be referred to in regard to the agency of flies is one which proved that if flies, after having walked over substances containing typhoid bacilli, were allowed to walk over agar plates, colonies of typhoid bacilli developed along their track. The open latrines of an infected camp filled with typhoid excrement, are a favorite resort of flies, thirty-six species of which were found during the Spanish-American war to breed in human excreta. The statement given by Dr. Simons in the discussion on Dr. Canney's paper, derived from experience in that war, is much to the point. Of two regiments and a civil population on the same ground, having the same water, milk, and food supply, one regiment alone contracted typhoid badly, and it alone had neglected to use fly-proof cages for its provisions; and at a certain stage of the same war, when quicklime was placed in the latrines as an antiseptic, the food substances in the neighboring kitchens became quite white from flies settling on them.

In regard to dust as a vehicle, the evidence adduced, even in regard to one of the Quetta outbreaks, seems fairly strong in its favor, for while at a previous outbreak the water supply had been found infected, in this, neither in regard to the water nor the food, could any suspicion be justified, yet the latrines, as Lieutenant-Colonel Giles mentioned, being close to windward of the barracks, the disease always commenced in the corner nearest the latrines and trenches, and ceased and remained absent for two years when these were removed to leeward of the barracks.

In South Africa, in camps of 40,000 men, typhoid was prevalent. In these there certainly was not what the Americans are said to have decided is an essential for standing camps—a water carriage system of drainage. Sandstorms, giving the appearance of a dense London fog, were frequent. The cooking of food was in the main done in the open, and as a result sand was freely mixed with the food; under such circumstances, no wonder is it that a man who refrained from drinking unboiled water was infected nevertheless with typhoid bacilli. It may be admitted that there is no need for further evidence of the spread of typhoid fever by water supply, and that a good case has been made out for its spread by the air. Both probably occur; which is the more important in the varying conditions resulting from the exigencies of modern warefare is a subject for future investigation.

It is the urgent duty of the medical profession, however, to point out every possible source of infection irrespective of any immediate effect it may have in official circles. The suggestion has been made that if infection by the air—a source difficult to control—be admitted it will be considered by military authorities a waste of energy to institute precautionary measures in regard to the water supply; but this is an unworthy suggestion, and in any case the onus of responsibility must not be allowed to rest on the profession, as it would do if such an argument were allowed to influence their conduct.

Various suggestions have already been made for meeting the difficulties of preventing typhoid infection among masses of soldiers, one of the most recent being that of Dr. Leigh Canney himself, namely, the organization of a Royal Water Corps. When a question in regard to this proposal was asked by Sir Michael Foster in the House of Commons on the evening of August 16th, a reply was given by Lord Stanley that the suggested measure had received careful consideration, but was found to be entirely impracticable for active service. Whether some modification of this method directed against the risk of waterborne infection be adopted or not, the best practicable precau-

tions, possible at the time of need, should be directed to every possible source of infection, and it certainly behoves this and every country to organize in time of peace a preventive system against those diseases which are responsible for more deaths in armies than all warlike instruments put together.

The President's Case and the Newspapers.

Much has been written concerning the President's case. Commenting upon it editorially the Journal of the American Medical Association says:

The majority of the newspapers of the country have honestly tried to supply their readers with all the facts, and only facts, about the President's case. But the possibilities for the "fake" in yellow journalism were too many to be ignored and consequently these were "extraed" with profitable results to the proprietors. While the bulletins of the attending men repeatedly announced that their patient was resting comfortable, these newspapers contained columns, double-leaded and scare-headed, about the "agony" and the "torture" which the President was bravely bearing, all pure "fake." The "agony" of the operation consisted in the little unpleasantness of the first few whiffs of the ether. Except when the wounds were dressed, the President has had no pain, and the dressing of the wounds probably caused but little suffering, if any. There would be no pain from the wounds in the stomach and of course none from the abdominal wound, unless vomiting ensued after the anesthetic, which we understand was not the case. As is usual in such cases, a few of the newspapers have been free with advice as to what should and what should not have been done by the surgeons, this supplemented by suggestions from members of our profession in the form of interviews. As a rule, those in attendance on a case know better what are the conditions and how they are to be met than outsiders. This does not seem to be realized by some, who, we are sorry to say, belong to the medical profession. The papers are placing the credit of the successful outcome where it belongs. There is no attempt to belittle the work of the surgeons or to reflect on the good judgment of those in charge of the President's case. The advance of surgery is acknowledged by one paper in the sentence: "The surgery of to-day and not that of twenty years ago was applied to the stricken President." Another says: "The public in its gratitude for the progress made by the president within the most critical period following the operation will not forget the credit due to the surgeons who attended and to the practitioners who during the past half century have worked with such good purpose in securing the wonderful advance of surgical science." And another: "If he should finally recover, as all signs now indicate, it will be justly regarded as the most notable triumph of twentieth century surgery." In similar manner the newspapers are all speaking a good word for modern medicine.

Hospital Abuse.

It seems that our Australasian friends have to deal with various hospital irregularities just as we do. It is certainly unprofessional and morally wrong for a physician to send his pay cases to a free hospital, thus indirectly benefitting himself at the expense of a charitable institution. The Australasian Medical Gazette says:

The question of hospital abuse has again come into prominence. It is a burning argument, now flaming forth, and now smouldering, but ever recurring, like the stubborn fact it is. At the present time it is coupled with an unfavorable criticism of the conduct of certain honorary surgeons, who appear to have been in the habit of receiving fees from inmates of the institutions which, nominally at least, they are supposed to serve without material fee or reward.

As to the *paying patients*, we believe that among medical men a universal feeling prevails that the best form of public hospital should not entertain them, and that only the patient who is poor and indigent can rightly be looked on as a worthy recipient. Doubtless, to reduce the test for admission to this simple standard, would be a very desirable conclusion. But the time has not yet arrived, though much in that direction has been and may still be done.

The case of the honorary surgeon who receives fees is a matter that can be considered in itself, as it is not inseparably connected with the abuses just mentioned. These officials are regarded by their fellows with very mingled feelings. Many hold that they are Laodiceans of an undesirable type, and that the orthodox treatment of such doubtful persons is distinctly indicated in their case. The honorary surgeons found fault with are not inclined to strongly defend their questionable position. At the best they only contend that their warrant lies in the fact that they form a part of an important phase of benevolent work. Of that phase they were not the designers, and they do not feel called upon to be its destroyers. Between these two points of view are others that need not be here enlarged

on. What we desire to suggest is that a judicious exchange of opinion among confreres would very likely bring about a better understanding in this matter than any amount of acrimonious discussion. Not first wholesale condemnation, and then proposals for a *rapprochement*—such a course is irritating and likely to defeat its own end. Rather let a small committee, from the hospitals and the profession, jointly consider the facts in conference, and then proceed to such further action as may in the light of these facts appear desirable.

Opportunities for Medical Research in America.

The Medical Record, September 14th, 1901, in its leading editorial discusses this very interesting subject as follows:

When one pauses to examine the currents in the stream of medical progress in this country, one cannot but see that in the drift of events research in experimental medicine is gradually assuming a more and more important position. The two factors that led to the growth of the present opportunities for research in pathology, bacteriology, and hygiene were the evolution of the American university from a mere "boarding school where the elements of the learned languages were taught to youths," as Mr. Pattison, Rector of Lincoln College, once said of Oxford, to a seat of learning and research modeled after the German prototype, and the development of the old-fashioned American medical school, with its two years' curriculum of didactic lectures, into the modern type with four years of thorough training in laboratory and clinic.

Twenty-five years ago there was scarcely any provision for the pursuit of medical research in this country. The laboratory of the College of Physicians and Surgeons of Columbia University was established in 1878—twenty years after the appearance of the first edition of Virchow's *Cellular-pathologie* and twenty-eight years after the discovery by Davaine of the first important pathogenic germ—that of anthrax. The Carnegie Laboratory of the Bellevue Hospital Medical College was opened in 1885; the Loomis Laboratory of the New York University (now of Cornell University) in 1886; the Hoagland Laboratory in Brooklyn in 1888, and the Johns Hopkins Hospital Laboratory in 1889. The cornerstones of the other pathological laboratories throughout the country for the most part bear later dates.

To-day there is scarcely a second-rate medical school in these States that does not provide some opportunities for medical research. At Johns Hopkins, Columbia, Harvard, Pennsylvania, Chicago, and some of the other universites there are scholarships and fellowships open to qualified workers in pathology and allied themes. At each of these institutions, there are on the average from three to five such fellowships. Thus, for example, there are at Columbia the three fellowships of the Alumni Association, the Alonzo Clark scholarship and the Maria McLean Proudfit fellowship, five in all. The number of leading laboratories in which such fellowships and scholarships are maintained may be estimated to be, at the highest, ten; so that there are at present about forty men in this country who receive incomes for research in medicine.

The recently organized Rockefeller Institute for Medical Research will make possible the appointment of about forty additional men; in other words, will double the number of men engaged in this work in America who are paid salaries and who are not necessarily occupied in teaching.

The plan of work of the Rockefeller Institute excludes for the present, any expenditure for a building, though the ultimate desirability of a central laboratory is not ignored by the Board of Directors. In this, we fancy, the directors are following the advice of Huxley as given in his address at the opening of Johns Hopkins University, September 12, 1876: "It has been my fate to see great educational funds fossilize into mere brick and mortar in the petrifying springs of architecture, with nothing left to work the institution they were intended to support."

Mr. Rockefeller placed at the disposal of the directors two hundred thousand dollars, of which the sum of twenty thousand is to be extended annually. It is understood that the gift will be increased as the demands of the work grow. This money is to be divided, according to the present plans of the Board of Directors, into sums averaging about five hundred dollars each, which shall be paid annually to the holders of the scholarships or fellowships established by the institute. In special cases, the salaries will be made larger, but in others the remuneration may be less than the average. The appointments are to be made in each case for one year only, although reappointment for another year will probably be given to such men as require more time for the completion of their work. The candidates will be recommended to the Board of Directors by the heads of the various laboratories, and from the list thus formed the directors will make their selections. Each candidate must be certified as to his qualifications, especially

as to his ability to carry on the research undertaken, and must be pursuing or about to pursue an investigation on some important subject in pathology, bacteriology, or hygiene.

It is evident that this plan is in every way calculated to secure the object of Mr. Rockefeller's gift. Yet, in one respect, we should venture to suggest a change, namely, as regards the salaries paid to these workers. Five hundred dollars may be a bait to the recent graduate, but one cannot expect a man of maturer years and increased financial needs to give most of his time for so small an annual income. While a certain number of beginnings in pathological research may be admitted to these scholarships, it would certainly be advisable, if not necessary, for the attainment of results of the greatest value, that men of experience who have already made their mark in science be attracted toward this crops of investigators by salaries representing a modest, but sufficient competence. It must not be forgotten that the attention paid to the results of an investigation by the scientific world is directly in proposition to the amount and value of the investigator's previous work, and that the weight of his conclusions depend upon the same factor.

Again, if the appointments are made for one year only, the personnel of this body of workers will constantly change. What advancement in the ranks of his fellows will be open to the scholar who has completed an investigation on a difficult and unexplored question, and what will become of him after his term of scholarship is at an end? Every one of the forty or more Rockefeller scholars cannot obtain an academic appointment at the end of his year of scholarship—there are too few vacancies in the universities for that. It would seem better to arrange for a system of grades with increasing salaries in which promotion will be secured by length of service and value of work done, for in this manner there would be a survival of the fittest, the lower ranks changing from year to year, the upper being filled by scientific men of the highest type. The Rockefeller scholars would not then be in the position of our army contract surgeons, who have nothing to look forward to except an honorable discharge, promotion or pension being out of the question. The institute would rather support a body of men who could devote themselves entirely to research, and who would not be obliged to teach or to do other work to make both ends meet. A good teacher is not always a good investigator, and one who is unsurpassed in research may not be able with success to impart his knowledge to others. In such cases the universities might contend among themselves for the honor of having Rockefeller research scholar on their academic staff. In this way the institute will become a nursery for both teachers and investigators and its fellowships will be steps to the highest academic honors.

How to Stamp Out Anarchism.

The American Medicine offers the following editorial as a step by which anarchism may be abolished.

Such is the subject which, in the natural and just horror at the revolting crime of Czolosgz, has been answered by thousands of newspaper writers, each almost in a different way. With a strange unchristianity and disobeying the President's "Let no one hurt him!" many preachers have advocated anarchism (lynch-law, private vengeance, etc.) as a method of suppressing anarchism, and more than one newspaper has screamed for a return to Chinese and savage methods of torture and death. All such solutions do not solve the question and they show that as a people we are from "the reign of law," and from realizing the demand of our own Constitution, that "no person shall be deprived of life, liberty or property without due process of law. The attempt to formulate any laws on the subject which do not infringe on the right of free speech, and upon other rights necessary to the continuation of our republican form of government, is also found to be an extremely difficult thing, however much we sympathize, as indeed we do, with the aim. Our immigration laws should be made as straight as possible because, however justifiable anarchism may be in some European states, it is utterly illogical and out of place with us. To the lawyers and legislators, we, as physicians, must leave the task of making laws that are based upon justice, and upon a recognition of the true principles and methods of progress in penology is that the object of punishment is not vengeance. All suggestions of plans based in part or entirely upon such a conception are wholly unscientific. The vengeance theory has been demonstrated false a thousand times, and every penologist is against it. It simply increases crime instead of diminishing it. We have abundantly proved it ourselves with our lynchings. Indeed, it may be confidently that if we do not stop our own lawlessnss in this respect and in many others, we ourselves remain genuine anarchists, of another type perhaps, but we have no logical reason, therefore, for suppressing a similar sect of our own school.

In fact, all plans of reform finally resolve themselves into movements for the regeneration, education, enobling of every citizen. But that, of course, is a slow process, and we are likely to renounce effort in such cases because of the enormity of the task and the ages it will take to carry it out. Suppose we begin therefore, by using all our personal endeavors to lessen our own anarchistic practices, such as our lynchings; our indifference to political corruption, our vicious police systems, and our assassin-bosses; our class legislation; our wild fury of luxury; our materialism and atheism; our indifference to the value of human life as shown in the barbarously high death-rates of many cities and states; our support of commercials of yellow journalism. These and many similar depravities of our life are breeders of anarchism, or they are at least fertilizers of the soil out of which it will inevitably spring.

Prophylaxis, Disinfection and Contagious Diseases.

Great good has come from the prophylactic measures that are used today for the prevention of contagious disease. Prophylaxis promptly and properly carried out, leaves little else to be done. We note a good editorial which appears in Medical News upon this subject.

Quarantine and disinfection have hitherto been the chief means employed for the control of spread of contagious disease. The value of these agents consists in the ability to prevent the contact of the healthy with the infected and the power to destroy the contagium vivum in the surroundings of those sick with contagious diseases. Notwithstanding active measures, however such affections are common and it behooves us to ask whether the methods or quarantine now in vogue are efficient.

An opinion of their value may be gathered from a study of the results obtained by different methods of quarantine and disinfection when applied to an infectious disease the bacteriology of which is firmly established. In one of our large municipalities, up to the year 1895, the method of disinfection in vogue after diphtheria had been the time-honored sulphur fumigation. Quarantine methods had been restricted to exclusion from school, which restriction was released when in the judgment of the attending physician the patient had recovered. At this time radically different methods of quarantine and disinfection for this disease were introduced. The system of disinfection comprised (1) the removal of all non-washable goods from the infected apartment and the subjection of the same to live steam; (2) the application of a proper carbolic or bicholoride solution to all washable articles, walls, furniture, etc.; (3) in all tenement houses, in addition to school exclusion, the doors of the infected apartments were placarded with a sign denoting the existence of diphtheria within, which was not removed nor the patient released from quarantine until a culture from the throat had failed to show the diphtheria bacillus.

A great reduction in the number of cases was confidently expected. The following is the result, comparing two years under the old system with the same number under the new. In 1893 there were reported 1,672 cases; in 1894, 3,812 cases; in 1895, 4,216 cases, and in 1896, 4912 cases. The population statistics are as follows: 1893 996,715; 1894, 1,060,000; 1895, 1,091,646; 1896, 1,129,010. These figures show that the number of cases per 1,000 during these years was as follows: 1893, 1.6; 1894, 3.5; 1895, 3.9; 1896, 4.3. It may be said that the increase in the number of cases reported in 1894, 1895 and 1896 was in some measure due to the application of bacteriological methods to the diagnosis.

Previous to 1895 the methods of quarantine were notoriously lax and the ability of ordinary sulphur fumigation to destroy the diphtheria bacillus is well known, yet a very conservative opinion would be that the newer methods of disinfection and quarantine founded upon a scientific basis had at least failed to reduce the number of cases. A consideration of these figures shows the inability of advanced methods to improve materially the existing conditions, and forces us to the conclusion that if we are to be successful in this conflict other factors must be brought into play.

The production of artificial immunity as a prophylactic measure against bacterial diseases has recently been brought into prominence. The idea, of course, is not new as it has been utilized for over one hundred year with respect to smallpox. Within recent years inoculations have been used to prevent the spread of diphtheria, principally in institutions where large numbers of children are confined. The results obtained have been excellent and furnish much food for thought. Unfortunately the duration of the immunity thus produced is in most cases short, in contradistinction to that produced by vaccination, but still sufficiently long to meet the emergencies of a prevailing epidemic. The extensive employment of preventive inoculation against those diseases with respect to which the same is available cannot be too strongly urged at the present time, for it seems cer-

tain that in the future this is to be the most effective agent in the prophylaxis of contagious disease.

The London Hospital.

The Post Graduate of Sept. 1901, gives considerable space editorally of this great hospital and of work it is doing. The editor says:

At the Commencement of the Medical College of the London Hospital one the speakers said that the Governors were spending about $1,800,000 (£370,000) in bringing the hospital up-to-date. It cost $1,800 a day to carry on the Institution. This hospital is said to care for as many patients as any two others in London. The speaker, Mr Sidney Holland, then made an estimate of the quantity of sticking-plaster, lint, and so forth, used in this hospital in a year. He said 90 miles of sticking-plaster and 100 miles of lint were used, 10,000 cod-fish were said to be now swimming around New Foundland whose lives would have to be sacrificed to supply cod liver oil for the hospital for the next year. This is certainly a graphic way of putting the expense account of a hospital. Lord Lister expressed his delight at the wisdom of the hospital authorities in erecting a Pathological Institute of the largest hospital in England and in not yielding to the narrow clamor of those who said that a hospital was for curing people and not for study. They had shown their sense of the enormous importance of profound pathological study. It seems that a number of those who deprecate the use of hospitals for medical research exist in England as well as in the United States, but from manifestations on many sides in both countries it appears that the class is now a limited one, and that we shall all finally get the money that is needed for study as well as for the immediate care of the sick and injured. Queen Alexander of England, having seen in her native Denmark the work of Dr. Finsen, of Copenhagen, in curing lupus by the use of intensely strong electric light, asked the authorities of the London Hospital to start Finen's system of treatment there, and contributed £100 toward the work in July, 1899. Six months after, the first lamp, with four lights, were started. This method of treatment is very expensive. It cost about $6,000 to run two a year. The House Physician in charge and two nurses were sent to Copenhagen to learn Dr. Finsen's exact methods. The hospital authorities assert positively that the results are certain, although the treatment is slow, but painless in its work. Certainly New York, after the experience in London, ought at once to inaugurate in its hospitals the light treatment for lupus. Here is another opportunity for our generous rich men, of whom we now happily have many.

The Professional Income.

This in an age of progress. With the advancement made in the sciences. it can be noticed that the responsibility and worth of ones services is more recognized than in former years. In an editorial in the Medical Age we have this idea nicely put:

It was asserted within the hearing of the writer not long since that the splendid advancement of the medical sciences and surgery within the past half century had been seriously marred by the increase in value of professional services. Nor was this all, it being further said that the growth in importance of specialism had—for the reason already given—been of little or no benefit to the great mass of the people. The medical code was quoted as a badge of the profession's surrender to commercialism.

There is no need to exploit on these pages the utter falseness of imputations such as these, for the general practitioner and the specialist are alike taught that science knows neither class nor condition among men, but that its life. vitality, and progress are bound up in all. Nor is it necessary to show by set forms that an infinitely higher type of service and skill than the past has known should, by natural law, establish itself on an ascending plane of value. And no one in his right mind will deny the privilege and duty of the able to abide by the real worth of whatever they receive; while professional interest and common-lot humanitarianism stand between the rest of the people and their separation from the benefits of increasing knowledge.

Few if any physicians are totally spared the embarrassment which proceeds from the insinuation on the part of a patient or his family that a charge regularly made is not fully justified. It is especially annoying when one reflects that his service could not be understood and appreciated even were the will present. He may perhaps be called a refined product of an age possessed by a greed for gain, and placed upon his mettle to withstand the blunt but cutting charge.

As a matter of fact, every age is apt to win for itself a distinctive form, not always with notable accuracy as to its characteristics, and always with undue prominence of what are merely incidental features. But the descriptive phraze once applied is tolerably sure to cling to the period as long as men are enamored of glittering generalities.

Differential Diagnosis Between Typhoid Fever and Appendicitis.

The differential diagnosis between typhoid fever and appendicitis may seem a trivial matter, yet this error has been made by men quite eminent in the profession. Comments are made upon the possibility in an editorial in the Medical Journal as follows:

We have heard much concerning the differential diagnosis of appendicitis and right sided pyosalpinx and other conditions found in the right iliac fossa, but we have heard comparatively little concerning the differentiation of typhoid fever from inflammatory conditions about the appendix vermiformis. A rather unique form of typhoid fever it must be that would simulate appendicitis, and yet this *does* occur. We are in receipt of a communication from our good friend, Dr. Richard Musham of the Moabit Hospital, of Berlin, in which he details a case of typhoid fever that simulated appendicitis so closely that operation for that disease was done. The history of the case was not at all suggestive of typhoid fever, the most conspicuous deviation from the regular type of the disease being its beginning with a severe chill. Then again, the facial aspect, the roseola and diarrhea was absent. Pain, tenderness and a sensation of a mass in the right iliac fossa at McBurney's point pointed to appendicitis. At the same time there was no diazo reaction and no splenic tumor. In short, the case was an extremely atypical one, and the probable diagnosis of appendicitis was made; operation was performed and the true state of affairs immediately discovered. An ulcer was found which seemed to be quite near the serosa so that a row of sutures was placed in the gut at the point. The appendix vermiformis was quite normal. The abdomen was sewn up. The latter course of the disease was uneventful, the patient going through the attack successfully. On the eleventh day the Widal reaction showed a positive microscopic result, but no microscopic reaction. Roseola and splenic tumor later developed. Diazo reaction continued to be present.

This case is an extremely important one, because it touches on a point upon which not much stress has hitherto been made, namely, the probability of some cases of atypical typhoid fever being simulative of appendicitis and operated upon for that disease. The case reported by Musham went on to recovery, but a similar case reported by Rendu succumbed to the malady. It might be well for all practitioners to bear this case in mind at the present time, when typhoid fever is making its annual visit with us.

The Autopsy in the President's Case.

The New York Medical Record for Sept. 21, 1901, in its leading editorial, discusses the President's case in a very clear and forcible manner. The editor says:

The revelations of the autopsy on the body of President McKinley are deeply significant from many pathological and surgical points. While the report of the physicians is meant to be merely a preliminary one, the main facts thus far presented are sufficiently explicit to anticipate in all essential particulars the fuller account which is promised later.

Taken in connection with the clinical history of the case, and the extremely optimistic views of some of the consultants, the discovery of certain of the lesions named is both a surprise and a disappointment. It is a pity indeed that such an evident failure in diagnosis should have been so conspicuously demonstrated to the general public. It has proved, in fact, the lost opportunity for an entirely contrary exhibition of judgment, skill, and tact.

In reconciling the findings after death with the symptoms during life, there are many relations between causes and effects, which, although hidden before, are now very painfully apparent. We may comfort ourselves by saying that, under the circumstances, events were uncontrollable and results unavoidable, but the public, alas! view the real situation in a very matter-of-fact way.

The operation of suturing the stomach wounds was timely, proper, and, so far as it went, brilliant. Medical men the world over were proud to hear that it had been done so promptly and so well upon a person of such importance But now, in the light of the autopsy, we know that the operation, carefully conducted as it was, was necessarily an incomplete one. This is speaking of the procedure from a surgical standpoint, irrespective of the ultimate doom of the patient in any event. Time was precions, and prolonged search for the ball was impossible, consequently the condition and course of the wound beyond the stomach could not be positively ascertained at the time. The surgeons satisfied themselves, therefore, that it was safe to leave this terminal wound to itself and close up the abdomen. They used their best judgment under trying conditions; but, unfortunately, that judgment was in error.

Then came the bulletins and interviews so eagerly read by an anxious nation. It was thought that at first the stomach wounds were the only causes for anxiety, that the ball having lodged in the muscles of the back would become safely encysted, and

that septic peritonitis from possible leakage of the stomach contents was the only thing to be feared. When the latter danger was over, there came the surprising intelligence that the patient would certainly recover. This in face of a continued high temperature and rapid pulse! Then it was announced that all the wounds had healed perfectly and the only real danger was centered in a weak heart. Hardly had this bulletin been issued when it was announced that the external wound was found to be infected, necessitating the removal of some stitches. Still it was said that the distinguised patient was doing excellently well—in fact, even better than before. Next was the report of an attack of indigestion, claimed to be due to food given too soon, and last of all and without warning came the appailing accounts of his rapid collapse and surprisingly quick death.

Worst of all, however, were the actual facts of the autopsy which seemed to prove to the public that the doctors had been wrong in their conception of the case from beginning to the end.

Sadly enough, not one of the principal leisons gave any evidence of its existence during life. The good condition of the wound behind the stomach, of which all the surgeons were so pronouncedly confident, was an illusion and a snare. What was considered to be a most insignificant factor became the most important of all. Instead of the terminal track of the bullet being healed and the ball encysted, it was found, at the autopsy, to be gangrenous throughout. Thus a most startling error of diagnosis was flauntingly accentuated by an indignant and astonished press.

The practical surgeon very properly asks himself why the condition and the direction of the track behind the stomach was not discovered at the time the parts were exposed during the operation? That the problem was not solved then and there was certainly not due to any want of forethought on the part of the operator, whose skill in his line no one can question. The only answer must be that such a thorough examination of the parts was impossible at the time. Still it seems hard to explain why all the gentlemen on the case were so satisfied with the real nature of a wound that they, obviously, knew nothing about.

The Medical Record was exceedingly anxious on this point and earnestly called attention to the possibility of there being a wound of the pancreas or kidney or both. Unfortunately, as the sequel too well shows, we were right in at least one particular.

Another matter is that which referred to the desirability of an x-ray examination to locate the ball. The Record urged this as of the greatest importance, and yet, with the apparatus at hand, it was repeatedly and publicly stated that such an examination was not at all necessary. In fact, it seemed safer to guess than to be sure. What comment suggests itself in this connection when even at the autopsy, so far as can be ascertained at present, it was not considered worth the trouble to search for the ball beyond a certain point! What excuse must be offered to the public for the utter inability to find the bullet even in a dead body? All these matters may, however, be properly explained when the fuller account of the post mortem is given to the medical and lay public.

Many different theories have been offered by the medical attendants concerning the cause of gangrene of the bullet track. By some the condition is charged to a poisoned bullet, by others to the leakage of pancreatic juice into the bullet sinus, and by still others to mere lack of recuperative energy in the tissues involved.

On these points, however, the profession is willing to suspend judgment, pending the completion and publication of the official reports of the post mortem examiners.

Viewing the strictly surgical aspects of the case in the light of the autopsical demonstration, certain points of treatment might naturally suggest themselves. Everyone knows that such an injury as existed in the President's case is uniformly fatal. The most favorable result that could have been expected was the healing of the wound and the possible establishment of a fistula. This would certainly be infinitely better even as a tentative measure than accidentally leaving a leaking kidney or pancreas in a closed cavity to work such mischief as was manifested in the gangrenous condition of the surrounding tissues of the case in question.

Allowing that the bullet had actually lodged in the muscles of the back, also that the missile was within easy reach, it would be following a good surgical rule to establish drainage by the most direct route posteriorly. This course, however, could not be followed, as the bullet, on account of the unfortunate conditions already noted, was not accurately located. Under the circumstances, therefore, and taking everything into consideration, it is comforting to note that all was done for the distinguished patient that was possible. In fact, as was repeatedly stated by the operator, "the case was a fatal one from the start."

In thus remarking upon the public aspects of the case it is only for the purpose of getting at the truth and learning per-

haps a useful lesson. In the same spirit we can afford to view the strictly professional side. To err is human, but wisdom comes from experience. It is safe to say that under like circumstances in future the gentlemen concerned would act somewhat differently. We sincerely trust that they at least would not then be asked to explain why they allowed a lost ball to be buried with the victim's body.

How the Dead May be Raised.

The Indian Medical Record, Aug. 28, 1901 gives an account of the following interesting cases. The editor says:

Starting from the fact that after death the tissues lose their irritability within certain but varying times, Herr Prus undertook a number of experiments upon dogs to demonstrate that, should certain stimuli be applied before this functian disapeared, the vital organs would again resume their usual conditions. He was able by post-mortem exposure and massage of the heart to produce contractions of that organ and respiration, which continued for a few hours. The method was later tried upon a suicide some two hours after death. The heart contracted, bnt only feebly, and soon stopped. Another patient died from an overdose of cholorform. Artificial respiration and all the usual remedies had been tried without avail; air had been blown into the lungs, but the patient remained pulseless, and without any attempt at respiration. He was undoubtedly dead. Not till then was heart massage practiced. His chest was opened, and the heart was grasped by the hand of the operator, compressed, allowed to dilate. No contractions of the walls could be at first felt, but after a few compressions the rythm of the heart was gradually resumed. At the same time air was forcibly blown into the lungs, and the chest pressed to imitate expiration. When the heart had been massaged for thirty minutes a respiratory gasp occurred. It was a little time, however, before the patient respired unaided, and then only at intervals. The operation had been commenced at 8 a. m., and lasted until 12 noon, the heart contracted vigorousiy, the respirations were almost normal, the pupils of his eyes contracted and dilated with inspiration and expiration. The pulse was strong and regular, and the jaws were tightly clenched. The man was alive again. The several wounds were at once sewn up and dressed, and the patient conveyed to his bed. For twent minutes breathing proceeded satisfactorily, but quite suddenly it became embarrassed and quickly stopped. Air inhalations were again given and continued for eight hours, together with artificial respiration, but no result was obtained. The heart, however, continued beating until 8 p. m., when it became gradually feebler and soon stopped. The dead man was only called back to life for a short time—the great fact is that he undoutedly was called back.

MISCELLANEOUS.

On the Physiologic Cure of the Morphia Habit.

W. Oscar Jennings.—The author claims that before the publication of his little work in 1890 there existed no treatment of the morphin craving founded on therapeutic indications. His first observations were made in his own case and he has had opportunity of verifying these during the last ten years. He remarks that there are many persons who lack the will power to carry out the treatment alone. There are others who want to get well and have no real craving that prevents them, but are suffering from hysteric neuro-mimetic craving. In these cases great tact is necessary. Such patients should never know how much morphin they are taking or what other agents are being administered. The symptoms, though really distressing, are entirely ideal. If a patient is seriously desirous of giving up, he should commence by renouncing all liberty of action during the treatment, give up his syringe and his solution and be guarded against all temptation. When the morphin is associated with some other addiction, the first thing is to suppress the other stimulant, whatever it may be. This is not difficult if it be alcohol or cocain. The quantity of morphin taken becomes more satisfactory instead of being antidoted, as it were, by the other stimulant when they were taken together. Jennings believes in the gradual reduction as slowly as is necessary to effect a cure without distress. It is desirable first to bring about a change as soon as possible in the mode of administration of the drug. If this can be effected early, so much the better; but there should be a gradual substitution of the rectal for the hypodermic injection the moment the patient is reduced to 2 grains by the skin. Two grains would seem to be the vital requirement; above 2 grains morphin can be found in the urine; below this it seems to be assimilated. From this point onward twice as much should be given by the rectum as by the skin. The great point is to get rid of the syringe, to

wean the patient from his accustomed stimulant. Moreover, an injection by the rectum is not agreeable and has not the fascination that leads to the constant use of the syringe. The patient is satisfied with what is really required to prevent discomfort. In giving morphin it should be remembered that this is not a sedative but a stimulant, the withdrawal of which causes a suppression of vital force and gives rise to general functional disturbance greater than would result from the privation of other stimulants. The utility of heart tonics is evident, The next great factor of craving is hyperacidity of the stomach and organs generally. This suggests the administration of bicarbonate of soda, a method to which he has been calling attention for thirteen years and the importance of which is now recognized by every writer. Bicarbonate relieves craving so far as it is caused by over-acidity in the same way that heart tonics relieve it when caused by cardiac sluggishness and nothing more. Other means of relief may be supplied as indicated but the third of his therapeutic triad is the hot-air bath. The effect of the bath is largely due to its tonic and sedative action, but it may also act as an eliminator of some excitant of craving. This may possibly be the oxi-di-morphin which is formed in the body and is considered by Marme as its chief cause. He insists on the non-alcoholic regime. There must be no reading in bed during the progressive reduction. For insomnia, cerebral galvanization is sometimes magical, but if unsuccessful the best hypnotic is trional. The fluid extract of coca and kolo are frequently of use and the only other drug taken constantly by his patients is valerianate of ammonia. He warns against the synthetic derivatives of morphia, such as dionin and heroin, which can get up a worse condition than morphin itself. The latter is only second to cocain as a drug to be avoided. It has been said that ex-morphin habitues are subject to periodical periods of craving, and these are more likely to accur in those who have undergone the slow reduction. These are errors, One of the best proofs of the progressive plan is that when properly carried out the patients gain in weight. One of the consequences of this, however, is a tendency to hyperchlorhydria and excessive uric acid, both of which are factors of craving. Besides this the ex-habitue is generally polydipsic and boulimic and does not restrain his appetite, drinks of alcoholics and eats in proportion. As he is easily tired, he has a disinclination to be active. He is nearly always saturated with uric acid and on the verge of bilious or gastric failure. This is the cause of what is called after-cravings. We must always remember that every morbid sensation during the past addiction having been treated with morphin, every malaise in the future will suggest it. The best proof that these are not real cravings is the result of treatment, for after being properly treated the cravings will disappear. When the ex-habitue is careful to lead an abstemious life he is not liable to such cravings. Everything should be done to keep up a stealthy tone of the system, taking exercise as much as possible without fatigue; the regular use of Turkish baths is also specified. The remainder of his paper consists in an account of cases illustrating the different phases and forms of the condition and the result of special treatment.—*Journal of American Medical Association.*

Uremia in Childhood.

The uremic accidents of early and late childhood present characteristic paroxysms; crises recurring at variable intervals, at times several weeks or months apart. They last a short time and are followed by a complete return of health. (International Medical Magazine).

1. Headaches which cannot be explained. These develop suddenly, sometimes provoked by intellectual work, sometimes occurring spontaneously. They are accompanied by veneral weakness, intellectual inaptitude and neurasthenia.

2. Vomiting, periodic or cycle, lasting two, three or four days, with absolute intolerance of both liquids and solids, more or less fever, emaciation and prostration. However, health soon re-establishes itself.

3. Bone pains or painful paroxysms of the joints, without fever, uremic arthralgias and ostealgias, often attributed to the growing age. These are increased by the auto-intoxication.

4. Divers nervous manifestations, cerebral excitement, nocturnal terrors, spasms of the glottis and convulsions.

5. Cutaneous manifestations, relapsing and chronic weeping eczemas, pruriginous and lichenoid eruptions.

6. Urinary troubles; spasms of the bladder, incontinence of urine, gravel, and at times nephritic colic, which sometimes resembles ureteral uremia.

7. Respiratory troubles; asthmatic crises spasmodic rhinitis, hay fever, which seems to depend upon the sudden congestion of the mucous coats.

All these manifestations, so unlike in the appearance of the clinical forms, so different also in their localizations, have a common cause, a similar pathogenesis, which

makes them members of the same pathologic family; this cause is uremia. The causes are principally hereditary. It is in the decendants of the gouty, the obese, those afflicted with gravel, the diabetics, the asthmatics, the chronic headaches, where one meets the manifestations I have mentioned. But the hereditary defects which these manifestations reveal may be increased by personal acquisitions due to bad alimentary hygiene. By the abuse of meats, by overfeeding, aggravated by sedentary occupations and want of exercise. It can also grow poor by a contrary hygiene. The diagnosis is made, less by the symptoms taken separately, and which are not characteristic, than by their relation to the time and the subject, age of the patient, periodic return of the paroxysms heredity and hygienic habits. Finely, the analysis of the urine, which is not to be neglected, will aid the diagnosis.

The prognosis, in spite of the prominence and apparent gravity of the symptoms, does not imply any immediate danger. But it is necessary to realize the future danger and institute a hygienic and preventive treatment. The diathesis is re-enforced and aggravated with age. Children who have not had the cephalgic crises or transient gastritis, will probably suffer from gout, diabetes, etc., when they reach maturity. We should strive to prevent this dismal outlook.

The alimentation should always be very closely watched and be in large part vegetable; no game or heavy red meats, no pork, no long kept meats. Give the preference to the white meats and fresh fish; use largely farinaceous foods, green and dried vegetables, cooked fruits; abstain from alcohol, drink milk and water.

Assure a regular action of the bowels, if need be by laxatives, enemas or suppositories, use graham bread. Care for the skin (baths, douches, rubbings with wet cloths), the muscles and the lungs (Swedish gymnastics, massage, physical exercise, good air). Do not neglect the hygiene of the brain, and in a word carefully guard the equilibrium and action of all the organs. The same hygiene will prevail in the presence of the paroxysmal accidents. In certain cases (cyclic vomiting), a strict diet is imposed. All these cases call for alkaline medication (sod. bic. or pot. bicarb., pot. citrat, lithia, etc.).

In the intervals of the crises we should use the thermal cure for the attenuation and prevention of a return, hot and cold sodium chlorid waters, waters of calcium and sodium bicarbonate, calcium sulphate and arsenical waters.

Presystolic Murmur Associated with Pregnancy.

Tyson (Philadelphia Medical Journal, May 18, 1901) reports a case of presystolic murmur complicating pregnancy. There was also a loud tricuspid systolic murmur. a systolic jugular pulse, a presystolic apical thrill with thumping first sound and an increased area of cardiac dullness. After labor the apex was replaced and the jugular juglar pulse disappeared. An enlarged liver could be then recognized. After 9 months patient again applied for treatment. Although again showing symptoms of cardiac insufficiency, the cardiac area was smaller, both murmurs were decidedly less extensive, the ringing first sound was still marked, the second pulmonic sound much accentuated and a faint murmur was to be heard in the first part of diastole. Two months later, the presystolic thrill and murmur had almost vanished, systolic tricuspid murmur was no longer to be heard, pulmonic second sound still loud, cardiac area much less. Nine months later patient suffered from an attack of grip, and had therewith a severe cardiac break-down; seen however, a month later, she was evidently vastly better than on any previous examination. Pulse 78, apex in mid-clavicular line, no sign of presystolic thrill, nor of presystolic or systolic murmur. The thumping first sound at apex and the accentuated second pulmonic were the only signs of previous or persistent cardiact leisons. The case is certainly a strikingly good example of returning compensation.—International Medical Magazine, Sept. 1901.

Inflammatory Affections of the Eyes of Infants.

Groenouw (Arch. f. Opthalmol., Bd. lii, p. 1) has examined bacteriologically 100 cases of infantile ophthalmia, clinically ranging from a simple catarrh to a severe blenorrhœa. From all these children secretion was taken from the neighborhood of the lower lids and inoculated on to serum, and subsequently the colonies examined by cover glass preparations. The results showed that the following organisms occurred as definite causes of these inflammatory affections: gonococci, pneumococci and streptococci; possibly in some cases staphylococcus aureus and bacillus coli. The etiological importance of other organisms was doubtful. The severe cases of blenorrhœa were for the most part caused by gonococci, but there occurred cases in which, in spite of most careful examination, gonococci were not found. The gonorrheal cases always showed clinically certain peculiarities. The cases without gon-

occoci were never complicated by corneal ulcer and ran a much shorter and milder course. Also cases of slight and medium severity without gonococci showed after a few days treatment marked lessening or disappearance of purulent discharge, whereas the pus of gonorrheal inflammation seldom disappeared under two weeks. Gonococci were the cause of the inflammation in 41 of the 100 cases, in 25 of these the affection was severe. In gonorrheal cases for days and weeks and weeks after pus has disappeared gonococci may be found in the conjunctival sac so that the use of silver preparations must be continued long after purulent discharge has ceased. The first signs of gonorrheal inflammation appeared in these cases from the second to the fifteenth day after birth. The presence of leucorrhœa in the mother is of little value in distinguishing gonorrheal from non-gonorrheal cases. With regard to the other organisms pneumococci were present in 5 cases (all of severe catarrh), streptococci in 2 (1 slight catarrh and one slight blenorrhea), staphylococcus aureus in 4, bacterium coli in 7. One case of severe blenorrhea was caused by micrococcus luteus. In the remaining 40 cases the organisms found could not with certainty be connected etiologically with the disease.—British Medical Journal.

Syphilitic Fever.

Futcher (New York Medical Journal, June 22, 1901) is of opinion that syphilis is often responsible for many cases of obscure fever. This fever may occur at various periods. (1) It sometimes occurs three or four weeks before secondary symptoms appear, and is then likely to be attributed to some other cause; (2) it may occur with the secondary eruption; this is the commonest form; (3) it may occur at any time during the secondary or tertiary stages. The author describes a case where the fever occurred twenty-nine years after the disease was contracted. The "fever of invasion," occurring with the secondary eruption, is usually accompanied by headache, malaise and rheumatoid pains. Syphilitic fever may be one of the following types: (1) Mild continuous pyrexia, with a temperature of about 101 deg. F.; (2) remittent fever with evening rises and morning drops —this is the usual character of the fever of invasion; (3) definite intermittent fever. The author concludes that (1) in all cases of obscure fever the possibility of syphilis should be borne in mind; (2) the affections for which syphilitic fever is most often mistaken are malaria, enteric, tuberculosis, sepsis and rheumatic fever; (3) careful examination of the long bones and viscera for tertiary syphilis should be made in all cases of fever of obscure origin.

Malaria Far-fetched.

Secretary Abbott, of the State Board of Health (Boston Record, August 29), says that during the past ten years every case of malaria investigated in Massachusetts has been traced to the presence in the neighborhood of Italian laborers. Italy, it is well known, is caused by malaria.

In its report on the sanitary condition of the Sudbury and Concord rivers made to the general court in May, the board stated plainly that there was nothing in the condition of the meadows near these rivers to generate malaria. But since 1890 191 cases have been reported in the distance of ten miles along the river from Saxonville, in a population of about 500. Few cases, the board says, had been reported below this point previous to 1895, and not many until 1898, since which time it has prevailed in Concord and at Billerica. In both cases, the board says, "the evidence tends to show that it was introduced into these towns by the laborers engaged in digging up the streets when obstructing the water works and sewerage systems. Upon the completion of the works in Billerica the number of cases rapidly diminished, while in Concord the effect of the work continued through last year, and we must wait through another season to learn whether it also diminishes here." As to other sections, the board expressed the opinion that were the water lowered to cultivate the meadows, pools would remain, where mosquitoes would breed, to communicate malaria.

Last week Dr. Abbott visited Ipswick to look into some cases of malaria in a farming district. He found four isolated houses, where the disease had prevailed for two years, and also found that Italian workmen had been laboring near two years ago, coming to each house often for water, etc. —*The Sanitarian, Oct., 1901.*

The Condition of the Kidneys with Referench to the Employment of Diuretics.

Dr. Arthur R. Elliott, (Med. New, August 10, 1901). Except in the case of the irritant-epithelial diuretics, the entire class of diuretics may be said to exert their effect upon the urine by acting indirectly through the circulation. Owing to the necessity for sparing the kidneys all irritation drugs given for diuretic purposes should act indirectly rather than directly, consequently the secretory diuretics are contra-indicated in irritative and inflammatory renal conditions. In functional urinary dis-

orders diuretics are mainly useful to overcome concentration and hyperacidity of the urine. To accomplish this, simple diluents and salines are best adapted. In acute nephritis salines are permissible throughout ths entire course of the disease and exert a beneficial influence by increasing elimination and clearing the tubes of inflammatory debris. Subcutaneous saline infusion constitutes our most powerful eliminant in desperate cases. In chronic nephritis the cardiovascular diuretics are the most useful owing to the fact that oliguria and dropsy are usually the result of circulatory failure. The dropsy under such circumstances, being of cardiac origin, may be benefitted by cardiovascular stimulants provided the kidneys are not too badly damaged. Dropsy of purely renal orgin is not amenable to favorable influence by diuretics. Although the morbid process in the kidneys may furnish us with our primary inspiration to diuretic medication, it is the condition of the heart and circulatory apparatus in most cases that determines the choice of an agent

Ozonized Air Required

The London correspondent of the New York "Hearald," August 25, states that among the numerous benefits London expects from Yerkes and other Yankey tube-makers to supply is ozonized air in circum-ambient abundance. It is argued that since the Americans have been given the opportunity to honeycomb the city with underground railways promising large dividends, they should be required to convert them into health resorts by the generation of ozone. One newspaper informs Mr. Yerkes that a trip around the the inner circle district road under its new management ought to be equivalent to a week a tBrighton.

The learned "Lancet," the voice of medical wisdom in London, falls in with the suggestion for ozonized tubes, and declares that like comforts and aids to health should be furnished by the surface railways and omnibuses. It says: "Railway headache is without doubt due to impure air of of the carriages. Many ventilation contrivances exist, but all are more or less abortive. Nothing freshens and sweetens stale air better than ozone. Now most railway companies have successfully adopted a system by which each carriage on its journey develops, by meaus of a dynamo attached to the axletrees, its own current of electricity for lighting purposes. There is no reason why the same current should not be utilized at the same time to ozonize the air of a compartment.

"The quantity of ozone required is small and there as really no serious obstacle in the way of having air in our tubes, tramcars and railway compartments. Fresh sea breeze automatic ozonizers might even appeal to the directors and shareholders of the district steam underground line as an alternate scheme for electric traction."

The "Lancet" gives the weight of its authority to the assumption that air in omnibuses is thoroughly vitiated and unhealthful. It ventures the opinion that the rate of the metropolis would be markedly reduced if these vehicles also carried automatic ozonizers. Unfortunately, the "Lancet" questions whether omnibuses moves fast enough to generate a respectable current of eletricity.—*The Sanitarian*, Oct. 1901.

Drainage of Wounds.

Paul Morf, (Bulletin of the Northwestern University Medicaal School of January 31, 1901) says that wounds may be divided with reference to drainage into two classes: first, those which are aseptic; secondly, those which have been infected, or are made to relieve suppurative conditions. In the vast majority of cases drainage is unnecessary in aseptic wounds. The danger of drainage is due to the fact that the skin contains normally germs which cannot be wholly removed. The drain, whether capillary or tubular, moistened by secretions, is a ready pathway for the entrance of such infection from the surface to the deeper structures. Aseptic wounds in which no antiseptics have been used have, as a rule, little oozing. Healthy tissue can take care of a large amount of extravasated blood and lymph. Drainage in aseptic cases is limited to those cases where there has been much traumatism, and where large areas of lympathic vessels have been opened. Examples of this class of wounds are furnished by amputations of the breast with their attendant dissection of the axilla, amputation of the thy and hip and extirpations of tubercular lymphatic glands. Another class of cases is where there remains "dead spaces" which cannot be obliterated by deep sutures or other means. Examples of these are furnished by unilateral thyroidectomy and operation for carcinoma of the rectum. In most these cases twenty-four hours is a sufficient time to leave the drain in position. At the end of that time the tissues have accomodated themselves and the dead spaces are obliterated.

In infected wounds, and those made for the relief of septic foci, drainage is demanded almost without exception. Drainage of abcess empyemas and suppurating

joints should me made in the location which gives the best possible escape to the secretions. A good sized fenestrated rubber tube is to be preferred, which, if possible, is to be carried through the cavity and out at a counter-opening. As the suppuration lessens this is to be replaced by a drain of iodoform gauze.

In this relation of drainage to the abdominal cavity it is difficnlt to make a general statement, but drainage is useful when pus is found free in the peritoneal cavity, as in cases of acute suppurative peritonitis; where there is localized pus formation, the suppuration being walled off by adhesions —this class of cases includes appendicular abscess, pelvic disease and pus tubes. Drainage must also be employed in the removal of pus from hollow viscus.

The Semeiological Value of the Examination of the Blood in Cancer of the Stomach.

Hartmann and Silhol (Rev. de Chir., Nov. 2, 1901) have recently communicated to the sociéteé de Chirurgie de Paris the results of some researches made on the blood of surgical patients. In the course of these researches they have been convinced that in cases of cancer of the stomach, an examination of the blood is more likely to prove useful than a chemical investigation of the gastric contents. The authors, in their studies, made a particular investigation on two questions: (1) the degree of anemia characterized by diminution of the quantity of hemoglobin, which may depend on the reduction of the number of globules or on the reduced proportion of hemoglobin in their content; and (2) the existence of leucocytosis. The presence of cancer of the stomach, it is held, is indicated by a well-marked association of decided anemia with decided leucocytosis. Anemia is marked less by the diminished proportion of the hemoglobin in the globules, than by (1) a diminished proportion of the hemoglobin in the globules;(2) by irregularities in the form of the globules, indicating a profound modification of the elasticity and textuie of the red gloubles; and (3) by inequality in the size of those globules that are not misshapen. The leucocytosis, to have any value as a symptomatic sign, should be very marked, and should affect especially the mono-nucleated cells.—*British Medical Journal*, March 23, 1901.

Differentiation of Tuberculous and Non-Tuberculous Pleurisies.

Dieulafoy (Gez. degli Osped., July 4th, 1901) concludes idiopathic pleurisy *a frigore* is really of a tuberculous nature, sometimes primary, sometimes secondary, to pulmonary lesions. The most certain diagnostic method is the microscopic examnation of the centrifugalised deposit from the effusion. In cardiac and renal cases there is nothing but scales of endothelium formed of a few cells and also a few red corpuscles—that is, the contents of an œdematous exudation. In pleurisies due to the pneumococcus, streptococcus, etc., the chief elements are multinuclear leucocytes, the red corpuscles are more numerous. Finally, in tuberculous cases there are lymphocytes and numerous red corpuscles. Dieulafoy looks on the lymphocytes not as having migrated from the vessels, but as the locally-formed product of the tuberculous process. The frequent cure of acute idiopathic pleurisy does not disprove its tuberculous nature: it is the most curable of the tuberculoses of the serous membranes. A patient cured of an acute pleurisy *a frigore* must be considered tuberculous, and must undergo for a time suitable hygienic and therapeutic treatment.

Transmission of Scarlet Fever to the Cat.

Scarlet fever has generally been regarded as a disease confined exclusively to human beings. In the outbreak of scarlet fever in Marylebone, 1885, the infection, which was conveyed by milk, was attributed by Power and Klein to bovine scarlet fever. Apart from this there has been little evidence of the disease amongst domestic animals. Dr. Rapin, in Le Progres Medical for May 4 gives an account of two instances in which he believes cats were attacked by the disease. The first of these occurred in 1894. A small white cat, only a few weeks old, was the inseparable companion of two little girls who were suffering from scarlet fever. It was soon noticed to become ill, and continually uttered little plaintive cries. Its body was hot, the skin rosy, and the tongue bright red in color. This was followed by a mealy desquamation of the skin and falling out of the hair, most pronounced at first in the posterior part of its body. The second instance was observed in February, 1900, in a cat three weeks old belonging to a little girl who had an attack of scarlet fever. It also suffered from a febrile illness followed by falling out of the fur, and branny powdering all over the body. In both instances the cat was very young, and to this Dr. Rapin attaches considerable importance, his view being that the susceptibility of the cat to the disease becomes gradually less with age until it is finally lost.—*Treatment, Sept., 1901.*

Ether or Chloroform.

In an article on the use of general anesthetics Wells of Chicago (Clinical Review, May, 1901), discussing the relative merits of ether and chloroform, says that some of the prejudice and fear of chloroform is based somewhat on its power of producing suddenly a fatal result, and this in many instances from careless administration; while with ether it is undoubtedly a fact that it escapes much of the blame it should rightfully bear because many of its fatalities and untoward results occur at varying intervals after administration, and are sometimes recorded as causes foreign to the anesthetic itself. Thus may occur catarrhal pneumonia, bronchitis, meningeal congestion, or even heart strain from the greater struggling and deficient oxygenation, as well as nephritis, induced by the irritation of the ether.

In warm and tropical climates, through India, Asia Minor, Egypt, and Syria, as well as in the southern parts of the United States, chloroform is used almost entirely as the one anesthetic, and fatal results are far from frequent.

In Syria, Post, during thirty years' surgical practice, has a record of over 200,000 cases of chloroform anesthesia without a death due to this cause alone. This fact, means more than the mere statement, for the chloroform is administered almost entirely by the native medical students, and to one who has ever witnessed the *modus operandi* of these raw recruits in their role of anæsthetists it seems miraculous that such success can be truthfully recorded.—*Treatment*. Sept, 1901.

Case of Penetrating Wound of Abdomen; Recovery.

C. Duer (The Indian Medical Gazette, Sept., 1901) describes the case of a strong, well-nourished Hindoo cooly, aged 28, who was admitted to the Rangoon General Hospital at 2:15 P. M., on the 13th November, 1900, with the history of having first murdered a woman and then stabbed himself in the belly. He was at once taken to the operation room and on removing some dirty cloths tied round him, a large wound with protruding viscera was seen. A towel rung out of hot carbolic lotion 1 in 60 was applied and chloroform administered. There was considerable shock, and blankets and hot water bottles were put to the chest and extremities.

There was a fairly clean cut wound extending from the umbilicus to the ensiform cartilage and prolapsed through it from above downwards were a considerable part of the stomach, some great omentum and some feet of small intestine with a good deal of sand and dust on them. On separating the viscera an extensive vertical wound of the great omentum was found and several considerable spouting vessels were ligatured with fine silk and much blood sponged away. A fæcal odor was then noticed, and two wounds in about the same place were discovered in the transverse colon, one in front of, and the other behind, the great omentum. These were closed with fine silk Lembert's sutures, a considerable narrowing of the gut resulting. Some soft consistent fæces which had extravasated were carefully wiped away. The prolapsed viscera which had been protected by hot towels were then well washed with hot 1 in 80 carbolic lotion and returned into the abdominal cavity which was closed (no drainage being employed) by a continuous catgut suture to the peritoneum, and interrupted silkworm gut sutures including all the other tissues. No general abdominal irrigation was employed. The operation occupied about 1½ hour. There was much collapse. An enema of brandy was administered, m. 20 ether were injected subcutaneously and 70 ounces normal salt solution were transfused into a vein at the bend of the elbow.

Next day, November 14th, the patient appeared to be doing well. The morning temperature was normal and the evening 90 deg. There was no distension, but no fæces or flatus had passed. Since a few hours after the operation the patient had taken 1 ounce milk with 1 ounce barley water every hour.

The following day, November 15th, there was considerable abdominal distension and some pain. A large enema with turpentine, and one ounce of sulphate of magnesia by the mouth were administered. In the evening there was great restlessness and much pain; the abdomen was greatly distended and no fæces or flatus had passed during the day. Without removing the patient from his bed two of the middle silkworm gut sutures were removed. Some omentum and gut presented but showed no disposition to prolapse. The gut was incised with scissors, and a good deal of gas and a little fæces escaped. The presenting gut was disturbed as little as possible and was not fixed *in situ* in any way. The patient experienced almost immediate relief and passed a good night. The dressing had frequently to be changed.

This day, November 16th, the morning temperature was 101 deg., it having been subnormal yesterday. All distension had subsided. Much fæcal matter passed through the fistula and the bowels acted naturally twice.

From this point the condition of the patient gave no further anxiety. He was kept on the same limited diet for seven or eight days. The discharge from the fistula steadily decreased, it was semi-solid and probably came from the transverse colon.

By November 27th the fœcal fistular had closed, and on this day all the silkworm gut sutures were removed, the wound except where the two sutures were previously removed having firmly healed by first intention.

The patient was discharged to jail on December 27th.

Treatment of Lateral Curvature of the Spine.

Willard (Therapeutic Gazette, June 15, 1901). The first element in treatment is close observation of the nude back and the effect of various motions upon the vertebræ and ribs. In young children the whole body should be stripped. Differences in length of limb and tilt of pelvising, and walking should be overcome. Cure lies in the hands of the patient, under the directions of the surgeon or the physical instructor. As many cases are rachitic, and nearly all have relaxed muscles and ligaments, attempts must be made to restore muscular equilibrium. No brace can accomplish this, and such means are worse than useless. Apparatus may sometimes be necessary to assist in the prevention of a rapidly increasing curve or for the comfortable support of an old curve, but is not part of the proper treatment.

The proper treatment is by means of exercises, and to prevent monotony these should be varied from day to day. For young children swings are useful, and for home use dumb-bells, clubs, and spring-boards, etc., may be used. Flexion of the body forwards and backwards and rotation in the axis of the vertebræ with the body fixed at right angles to the legs are recommended.

It is important that the backward flexibility of the dorsal spine should receive attention, In the position of hyper-extension with the hands clasped behind the neck, lateral backward movements are useful and also rotation and leg movements. Care should be taken that the patient does not simply lordose the lumbar region. The backward flexion can be more forcibly done by supporting the projecting ribs on the side of the convexity with a fulcrum or padded roll. In all dorsal lateral curves the muscles on the side of the concavity of the curve should receive at least one-third more work than those on the side of the convexity. For this purpose a trapeze with two bars one above the other should be used, also swinging rings of uneven heights. With an elastic rope exerciser many movements can be done by having one attachment for hand, another for foot, and another as a bridle for head, neck, and trunk work. The movements should bring into action all the shoulder muscles as well as those of the arm. Single hand work should be used to secure the full rotating effect on the chest on the side of the concavity. Self-suspension from a head-yoke has a corrective effect. In bad cases head extension and traction at night may be employed.

Benefit in bad cases is slight, the time for improvement being the early stages. Massage of the muscles of the back is a useful part of the treatment.

The Effect of Typhoid Blood Serum on the Typhoid Bacillus.

Dr. M. W. Richardson (Journal of Medical Research July 1901) reports the results of a series of experiments upon the effects of blood serum, particularly the blood serum of typhoid fever patients, upon the typhoid bacillus. Lack of space prevents a description of the details of these experiments being given here, and we only give what appears to us to be the important results contained in this most interesting and suggestive paper.

He finds that the serum of normal individuals and of typhoid patients convalescing, or in the later stages of the disease, has a marked destructive action upon the typhoid bacillus, while the serum of typhoid patients in the early or middle stages of the disease has not this power. If, however, the serum of a normal individual and the serum of a typhoid patient in the middle or early stages of the disease are allowed to act together upon the typhoid bacilli, the typhoid bacilli are destroyed.

Following the hypotheses of Pfeiffer, of Bordet, and of Ehrlich concerning the nature of immunity, Richardson explains these phenomena on the assumption that in the later stages of, or convalescence from typhoid fever, the blood serum contains two elements, the combined action of which produces the destruction of the bacilli and the recovery of the patient. In the earlier stages of the disease one of these elements, which is present in the blood serum of a normal individual, is lacking.

Upon this hypothesis, and in the light of these observations, the rational treatment of typhoid fever would seem to be to supply to the blood of the patient serum con-

taining the element lacking for the destruction of the typhoid bacilli; that is, normal serum. — *Boston Medical and Surgical Journal*, Oct. 3, 1901.

The Treatment of Nasal Polypus.

Lambert Lack (Journal of Laryngology, February, 1901).

Our attention should be directed towards eradicating the bone disease. The patient should be anesthetized, and the ethmoidal region should be examined by the finger, both through the nose and also through the post-nasal space, to determine the extent of the disease. If the middle turbinate be present it may be removed and any large polypi with it. The lateral mass of the ethmoid should be thoroughly scraped away by means of a large ring-knife, such as Meyer's original adenoid curette. The finger is introduced from time to time to observe the progress, and the scraping is continued until all friable tissue has been removed. "Great caution must be used when the region of the cribreform plate is reached, but the whole inner wall of the orbit may be scraped away with impunity." The operation should be performed with the patient turned well over on his side, and in case where the posterior part of the ethmoid is unaffected a large sponge may be pushed up into the post-nasal space. After the operation the bleeding is checked by packing the nose with a strip of gauze soaked in glycerine iodoform emulsion. The gauze should be changed every second or third day and the nose irrigated.

Antiseptics in Typhoid Fever.

The early expectations of the antiseptic treatment of typhoid fever have not been realized. In some quarters there has been a complete reaction, and antiseptic medication is not employed. But in looking over the vast amount of literature one is struck with the favorable results obtained by those who use internal antiseptics. While, therefore, we can only rarely expect to abort the disease, and we cannot hope to destroy all the typhoid bacilli in the intestine and tissues, we can expect that their growth be somewhat impaired and the intoxication lessened. Furthermore, fermentative processes caused by various micro-organisms in the intestinal canal are very much inhibited.

It is, therefore, expedient to administer some internal antiseptic.

After the initial purgative the intestinal antiseptic should be regularly given. Care should be taken that this medicine does not disturb the digestive function. Drugs which during the process of elimination are prone to irritate the kidneys should only rarely be used. Such a drug is turpentine and salol in large doses. When the kidneys are sound they may be given with benefit.

Guaiacol carbonate; creosote and the bismuth salts hold a high place.— *The Medical Adviser*.

Disease in the Philippines.

The medical officers in the Philippines have made some important contributions to science in the circulars they are publishing on the subject of tropical diseases. The information contained in these publications is furnished by the Army Pathological Laboratory, which has been in charge of First Lieutenant R. P. Strong, assistant surgeon, now at the Army and Navy General Hospital, Washington, D. C. He was for some time president of the board for the investigation of tropical diseases. The subject chosen for this initial pamphlet was that of the intestinal parasites found in the Philippines. This important subject lies at the root of a very great proportion of all diseases afflicting the troops. The researches on the amœba of dysentery have been particularly thorough, and some idea of the amount of work of the laboratory may be gained from the statement that this little book is based on 386 careful made necropsies and 1,793 microscopical and bacteriological examinations of the intestinal contents. The primary object of these circulars is to furnish physicians arriving in the Philippines with a summary of the diseases to be found there. The second and third circulars had for their subject dysentery and bubonic plague, respectively. —*New York Medical Journal*.

Extragenital Syphilitic Infection of the Lips.

Dr. Lieven (Munchener Medicinische Wochenschrift, June 18, 1901).

The author emphasizes the importance of an acquaintance with the fact of the occurence of chancre on the lip. This fact is often overlooked, with the result that disastrous mistakes are made.

It is true that usually a chancre of the lip partakes of those characters which distinguish the same lesion when occurring on the genitals; that is to say, the lesion is circular or oval, is indurated, and is accompanied with secondary enlargement of the lymphatic glands. But these typical characters are very likely to be modified by the peculiarities of structure of the lips and of the neighboring parts.

Thus, occasionally the lesion is so enormously swollen that a chancre is the very last thing that is thought of, the affection

being regarded as erysipelatous, or what not.

The author insists upon the importance of the presence of *induration.* When this is found the diagnosis of chancre is always probable.

The form of syphilitic lesion which is most often mistaken is the erosive. In some cases the chancre assumes this appearance from the outset, and it is then very likely to be wrongly diagnosed, being regarded either as herpes or as the result of some irritation—*e. g.*, cirgarette smoking.

In all cases enlargement of glands should be sought under the jaw and behind the sterno-mastoid muscle.

The prognosis of chancre of the lip is decidedly favorable. The importance of early diagnosis cannot be overestimated, as in this situation the communication of the disease is certain by means of cups and glasses —*i. e.*, if preventive measures are not adopted from the very first.

The Treatment of Tuberculosis with Ichthyol and Creosotal.

Goldmann (Arte medica, July 21st), at a recent meeting of the Medical Club of Vienna, recommended the following solution for internal use:

℞	Carbonate of creosote,	225 gr.
	Dissolve in rectified spirit,	q. s.
	Add ichthyolate of ammonium,	150 gr.
	Peppermint water,	6 ozs.

M. Three teaspoonfuls daily, in sweetened coffee, at the beginning of meals.

To conceal the taste of ichthyol, the author uses pills easily soluble and containing:

℞	Ammonium ichthyolate,	1½ grain.
	Carbonate of creosote,	⅔ of a grain
	Peppermint oil,	q. s.

M. ft. pil. From three to twelve pills daily. After a short use of the ichthyo-creosotal the anorexia ceases, and in some cases there is an augmentation of body weight of as much as eight or nine pounds weekly.—*New York Medical Journal, Sept. 14, 1901.*

The Diagnosis and Surgical Treatment of Prolapsed Kidney, with Demonstration of a Simple Method for its Detection.

Dr. Augustin H. Goelet (Medical Record, June 1, 1901) states that his observations have led him to the following conclusions, viz.:

1. That prolapsed kidney is more frequent than is generally supposed.

2. That it is often not suspected, because it does not always give rise to symptoms directly referable to the kidney.

3. That frequently it is not discovered, because by the usual methods of examination only an expert can discover it, unless the kidney is much enlarged or the subject is thin and the abdominal wall relaxed.

4. That palliative measures are of no avail, and therefore useless and unwise if the degree of prolapse is sufficient to produce symptoms.

5. That lumbar fixation is the correct method of treatment where there is no contra-indication, the operation being simple, devoid of risk, and successful when properly executed and the patient is given careful preparation and proper attention during convalescence, extending over a period of several months.

Prolapse of the kidney may be found in about twenty out of every hundred women presenting themselves for gynecological treatment, or one out of every four or five. Of this number 50 per cent. suffer in consequence sufficiently to require operation for its fixation. Of the remaining 50 per cent. those that have symptoms may be relieved in great measure by a properly adjusted abdominal bandage with pad. It must be borne in mind, however, that this is a very inefficien form of support, and it must not be expected that it will keep the ktdney in place, or that it will effect a cure.

The term "prolapse" is employed because it seems to define the condition more definitely than "movable" kidney.

The Closure by Bone of Skull Defects.

Victor Mertins, in Deutsche Zeitschrife fur Chir., gives his conclusions, as result of his experiments on animals, carried out at the suggestion of Prof. von Eiselsberg, to determine the best means of closing defects in bone resulting from loss of substance.

1. Decalcified bone is useless for the closure of bony defects of the skull.

2. Burnt bone may indeed lead to the formation of bone, but necessiates long detention of the patient under treatment and requires the wearing of a troublesome protective cap.

3, Against the primary implinations of bone splinters may be urged, (a) the difficulty of shutting out the danger of infection, and (b) the smallness of the splinters which makes it impossible to fix them firmly in the defect.

4. The use of bone splinters laid loosely on the dura is not to be recommended, since experiments and experience show that a quick healing in of fragment and defective edge takes place only when both lie closely in contact.

5. Boiled bone answers every demand that may be called foi in good plastic material and has none of the objections pertaining to decalcified or to calcined bone.

6. Accordingly, bone splinters of sufficient size may, after they have been boiled, be succesfully utilized.

7. In the use of boiled bone plate the caution must be borne in mind that it must be as firmly as possible fixed in place and that the contact must be particularly close at those points of the edge of the defect where the diploe possesses the greatest vascularity. Furthermore, one or two bean-sized openings in the bone plate should be made to the end that no blood should collect under the bone.

8. The material should be taken from any human body.

In addition to these uses of bone thus treated, it may find useful application also to the treatment of pseudoarthosis of the extremities where the defect may be remedied without shortening, and in joint resection, by means of the interposition of pieces of the prepared bone, shortening may be avoided. Finally, in this bone we have a means of accomplishing firm arthrodesis, where indicated.

Von Bramann reported at the last German Surgical Congress a case of congenital tibia-defect, which he succeeded in curing by this means.—*The Indian Lancet*, Sept. 1, 1901.

Taking Cold.

Many people are always taking cold, and hence are amost chronically catarrhal, because the spine weak. Find measures to tone up thespinal cord, relieve its susceptibility, and the patient will cease to take cold at theslighest provocation.

If you will notice the spine of these neurotic patients, you will see that, however young, they usually have round shoulders and stoop forward like old men. The muscles of back and abdomen are all feeble and relaxed. The internal organs, under the control of the spine, sag, prolapse and are ill-regulated, because the spine has little power to exert over them. The sympathetic nervous system has undue prominence, and a disturbance to one organ is exaggerated and rapidly spreads to others. It is like anarchy where there is no law to check it.

The three most sensative centres are: The nape of neck, the neighborhood of the fourth and fiifth dorsal vertebræ, and the "small of back or lumbar region.

To relieve the tendency to spinal congestion, weakness, and undue sensitiveness, the patient must first train him or herself to sit and stand erect. This requires an effort of will and constant attention in the begining, but a little practice will soon develop and makes firm and strong that long, powerful muscle, which runs along the side of the backbone, called erector spinæ. Then arm and leg movements should be practised a few moments daily to strengthen the several layers of muscles in the back.—*Indian Medical Record*, Sept. 4, 1901.

Principles of Cardiac Therapeutics in Recent Valvular Disease.

Eli H. Long (Therapeutic Monthly, June, 1901) divides the cases of actual cardiac dissability into (1) valvular, (2) myocardial, and (3) nervous. From the first indication of endocarditis the important element in treatment is absolute rest—rest in the recumbent posture, mental rest, and the avoidance of any strain upon the heart. This should continue beyond the acute stage until the heart is full able to do its work while the body is at rest, and the return to activity must be so graduated that the compensatory process will keep pace with the demands upon the heart up to the full requirement. Before the patient is allowed to get out of bed he should have a series of exercises which will very gradually increase the work of the heart. They should first be passive. The pulse should be carefully watched. Anemia and other general conditions must be appropriately treated and elimination be attended to. Cardiac stimulants, as a rule, are not necessary. The use of strychnine, without greatly stimulating the heart, will maintain a proper nervous tone of the hole circulatory apparatus. Digitalis would be indicated as an emergency drug. When the point of perfect compensation is reached the patient is dismissed with directions as to the future manner of life.

The Village Practitioner.

The September number of our highly esteemed contemporary, the Montreal Medical Journal, contains an excellent address delivered to the graduating class of the medical school of McGill University by Dr. William Gardener, the professor of gynæcology. It is a graceful and instructive address, dealing with many matters that are of importance to physicians, but it is on the text of its delineation of success in medicine that we must content ourselves with commenting in the present article. "By a successful career," says Dr. Gardner, "I do not mean that of necessity it must be a long and brilliant one. There are many obscure village practitioners who in reality are more successful than others who seem to float on the highest wave of worldly prosperity. To the country village practitioner

are given opportunities for the development of independent judgment and self-reliance, faculties or qualities which often re main latent in his brother of the city with ample opportunities for consultation when he is in deep water. In this way there are often developed in the country such men as we do not often see in the city."

It is indeed true that exigencies of country practice are well calculated to bring out a man's latent abilities, and in fact many of the resources that are now the common property of the medical profession had their origin in a country emergency that was met by one of those happy thoughts that seem almost the outcome of inspiration. Which one of us who have attended medical meetings in various parts of the United States and Canada has failed to make the acquaintane of more than one rural practitioner who impressed him as a master in medicine? Such are not the men who are ever ready to rise and join in the discussion of whatever topic may be under consideration; they are, rather, those who rarely have anything to say in public, but in a little group will emit over the mahogany a trenchant criticism in simple words, one founded on large experience and common sense. Such men exist in the cities, too, we are well aware, but they are indigenous, so to speak to the open country, and, it is there that they attain most surely to a commandiug position in the community and in the profession.—*New York Medical Journal*, Sept. 14, 1901.

Glycosuria and Cigars.

In the early months of this year the view was advanced, says the Medical Press and Circular, Sept. 18, 1901, that the habitual or excessive use of tobacco not merely determined an exacerbation of existing glycosuria but also, though less frequently, that it might actually set up this condition. The constituent of tobacco smoke, considered to be the causative factor in this relation, was not nicotine, but the carbon monoxide resulting from imperfect combustion; and it was further noted that this tobacco glycosuria was only observed in cigar smokers. The publication of this etiological study of glycosuria has directed a considerable amount of attention to the question, and it has been suggested that the variations in the results of Krehl's examinations made on certain beer-drinking students at Jena are capable of explanation if the existence of a tobacco glycosuria be admitted. The discrepancies in Krehl's conclusions have hitherto been ascribed to different individual dispositions to exhibit glycosuria and to the various kinds of beer, but the whole investigation may have been complicated by the fact that some of the students who were the subjects of observation may have affected pipe-smoking, and others may have indulged in cigars. When the increase in the habit of smoking is taken into account it will be readily seen how necessary it is to arrive at some certain knowledge in this connection with so serious a malady as glycosuria.

Prophylactic Inoculation against Plague.

Bannermann asks the questions: Is Haffkine's prophylactic harmful when employed in the incubation stage of plague, and when does protection begin to be effective? Calmette has condemned the use of the prophylactic serum in those who have been in contact with the disease, and Buchner states that immunity by this method is only obtained after about a week. Both of these opinions are shown by Bannermann to be contradicted by statistics which he has compiled from gaols and villages in Bomba. He states that an administrator may with confidence proceed to inoculate all in the neighborhood of a plague case, even though they have been in actual contact with it. The evidence produced also supports Haffkeine's statement that the serum begins to be effective within twenty-four hours. A degree of protection appears to be present for as long as eighteen months after inoculation —British Med. Jour.

The Influence of Maternal Inebriety on the Off-Spring.

Sullivan, in Launder's Year-Book on Medicine and Surgery. "The death-rate among the infants of the inebriate mothers was nearly two and a half times that among the infants of sober women of the same stock. In the alcoholic family there is a decrease of vitality in the successive children; for instance, in one family the first three children born were healthy, the fourth was of defective intelligence, the fifth was an epileptic idiot, the sixth was dead-born, and the seventh pregnancy ended in an abortion. There was a sensibly higher death-rate in cases in which the maternal inebriety was developed at an early period. Sober paternity had little influence, and in face of maternal drunkenness might be almost neglected as far as the vitality of the offspring is concerned. Conception in drunkenness had a distinct influence, as was shown by the fact that of the seven cases in which the condition was noted, in six the children died in convulsions in the first months of life, and in the seventh case the infant was still-born. On the other hand, imprisonment during pregnancy, if

the imprisonment began early in the pregnancy and lasted nearly all the time, seemed to diminish the evil effects; but the difficulties in drawing conclusions regarding this point were great. Of the children of drunken mothers that survived beyond their infancy, 4.1 per cent (a very high percentage) became epileptic (9 out 219.) These results show the danger to the community of the female drunkard.

Army Hospital Corps Men as Nurses for the President.

The male nurses in attendance on the President were men of the United States Army Hospital Corps, who were detailed for this duty immediately after the shooting of the President, from the detachment of the Hospital Corps men on duty with the field hospital exhibit of the Army Medical Department at the Pan-American Exposition. The men selected for this duty Acting Hospital Steward, Palmer A. Eliot and Privates Ernest Vollmeyer and John Hodgins. All of these men have completed the course of instruction at the school for Hospital Corps men at the army General Hospital at Washington Barracks, D. C. beside which Steward Eliot is a graduate of the Bellevue Hospital training school for nurses, and Private Vollmeyer is a graduate nurse of the Presbyterian Hospital of New York City. Private Hodgins is a soldier of nine years' service in the army and long experience in military hospitals. Much of the attention required in the President's case is of such nature as cannot be performed by the female nurses in attendance, and the efficiency of these men is snch as to have elicited much favorable comment from the staff of attending surgeons. Army medical officers are much gratified that the Hospital Corps should be officially connected with the President's case, and have the opportunity of so publicly demonstrating its professional efficiency and the excellence of its personnel.

Nicholas Senn Prize Medal.

The committee on the Senn Medal beg leave to call attention to the following conditions governing the competition for this medal for 1902.

1. A gold medal of suitable design is to be conferred upon the member of the American Medical Association who shall present the best essay upon some surgical subject.

2. This medal will be known as the Nicholas Senn Prize Medal.

3. The award will be made under the following conditions: *a*. The name of the author of each competing essay shall be enclosed in a sealed envelope bearing a suitable motto or device, the essay itself bearing the same motto or device. The title of the successful essay and the motto or device is to be read at the meeting at which the award is made, and the corresponding envelope to be then and there opened and the name of the successful author announced. *b*. All successful essays become the property of the Association. *c*. The medal shall be conferred and honorable mention made of the two other essays considered worthy of this distinction, at a general meeting of the Association. *d*. The competition is to be confined to those who at the time of entering the competition, as well as at the time of conferring the medal, shall be members of the American Medical Association. *e*. The competition for the medal will be closed three months before the next annual meeting of the American Medical Association, and no essays will be received after March 1, 1902.

Communications may be addressed to any member of the committee, consisting of the following: Dr. Herbert L. Burrell, 22 Newbury Street, Boston, Mass.; Dr. Edward Martin, 415 S. 15th Street, Philadelphia, Pa.; Dr. Charles H. Mayo, Rochester, Minn.

The Coming Academic Greatness of America.

Dr. George Bagot Ferguson, President of the British Medical Association (British Medical Journal, August 3d), in his presidential address on Scientific Research; the Indispensable Basis of All Medical and Material Progress, speaking of medicine one hundred years ago, says: "Among the other great names of France a hundred years ago, I should mention Bayle, Bretonneau, of Tours, and Alibert, and the surgeons Boyer, Larrey, Roux, and Dupuytren, a galaxy unmatchable then in any other part of the world. Small wonder that the earnest students of all nations flocked in those days to Paris, and still more a few years later, when we should need to add to our enumeration the names of Corvisart, Cloquet, Louis, Cruveilhier, Andral, and Bouillaud; just as they are now flocking to Germany, and will soon, I believe, betake themselves to America, and hereafter to London, if only its newly reconstituted teaching university turns out as successful as we all hope it may be."

Gangrene of the Uterus in the Puerperium

Zaborowski (Gazeta Lekarsko, Nos. 1 to 3, 1901) has prepared a monograph on this disease, which was first described correctly as "metritis dissecans" by Syromiatvikow in 1881. He collects the reports of 41 cases published since that date. In his own case

the patient was a young primipara. Six days after delivery fever, rigors, and urticaria set in; then abdominal swelling occurred, followed by fœtid vaginal discharge. At the end of a month the curette was applied; then a perforation of the posterior wall of the abdomen was detected; the uterus was therefore removed entire, and the patient recovered. It appears that metritis dissecans may have a well-defined line of demarcation, or this may be wanting, then the entire inner aspect of the uterus is invaded. Young women are most subject to this affection, especially when affected with serious general disorders, or when labor is lingering, and obstetrical operations are needed. The clinical features are usually just as described in Zoborowski's own case. Rashes are common. In some cases the uterus takes to contract and expel sloughy parts of its mucosa and muscular walls, sometimes the whole mucosa comes away. Abuse of caustics frequently causes this singular complication. The mortality is 32 per cent. Complete cure is rare, the uterus being much damaged. In bad cases hysterectomy alone will save the patient.—*British Medical Journal, Sept. 21, 1901.*

The Preservation of the Teeth of School Children.

Rules recommended by the School Childrens' Committee of the British Dental Association, and circulated for the information of managers and teachers of the national schools in Ireland: "Without good teeth there cannot be good mastication. Without thorough mastication there cannot be perfect digestion, and poor health results. Clean teeth do not decay. The importance of a sound first set of teeth is as great to the child as a sound second set is to the adult. Children should be taught to use the brush early. Food left on the teeth ferments, and the acid formed produces decay. Decay leads in time to pain and the total destruction of the tooth. The substance of the following rules should therefore be impressed constantly upon all children: (1) The teeth should be cleansed at least once daily; (2) The best time to clean the teeth is after the meal last taken; (3) A small tooth brush, with stiff bristles, should be used, brushing up and down and across, and inside, and in between the teeth; (4) A simple tooth powder or a little soap and some precipitated chalk taken up on the brush may be used if the teeth are dirty or stained; (5) It is a good practice to rinse the mouth out after every meal. (6) All rough usage of the teeth, such as cracking nuts, biting thread, etc., should be avoided, but the proper use of the teeth in chewing is good for them. When decay occurs it should be attended to long before any pain results. It is stopping a small cavity that is of the greatest service. In 10,000 children's mouths examined, 86 of every 100 required skilled operative treatment.—Journal of the British Dental Association.

The Death of Mr. McKinley.

In spite of the sanguine tone of the antipenultimate bulletins, our anxiety was maintained with regard to the ultimate fate of the unfortunate statesman whose death we all sincerely deplore. Although a few brilliant achievements in this direction show that recovery is possible after operation, especially if promptly performed the fact remains that perforated wounds of the stomach are, in the majority of instances, unavoidably fatal. The gravity of the injury is vastly increased when the victim is past middle life, especially if the kidneys are working with a narrow margin. The fatal result in the case under consideration appears to have been due to uræmia, precipitated, in all probility, by a laceration of one organ caused by the bullet. The tissues failed to display the tendency to heal which the surgeons in attendance had a right to expect, and no attempt at repair had appearantely taken place in the wounds. The uræmic process amply accounts for the prostration and cardiac failure which heralded the fatal *denouement*, and which no medication could possibly hold in check.—Medical Press and Circular, London Sept. 18 1901.

Removal of a Large Hairy Tumor from the Stomach.

At the recent Canadian Medical Association Dr. Bruce reported a case of a large hairy tumor of the Stomach (Medical Record, Sept. 14, 1901).

The subject was a woman aged twenty-six; she had been married six years and had two children. A lump was noticed in the abdomen two months previous to the birth of the last child. The patient had no symptoms. The lump was about five inches in width and it could be lifted forward. It reached to within 3 inches below the umbilicus. It gave the patient no special discomfort, there being absolutely no symptoms present. Dr. Bruce advised exploratory incision. This was done on July 22d at St. John's Hospital, Toronto. On opening the abdomen in the middle line the spleen and kidneys were found in a normal condition, but there was a large mass in the neighborhood of the stomach. The surgeon could make out a mass lying

free in the stomach, a portion extending through the pyloric end of the stomach. An incision was made into the stomach and the mass removed. After removing the mass of hair the opening of the stomach was closed in the usual way. Hot solution was given for two hours, and nutriment enemata for six hours. Twenty-three hours after the operation sips of hot water were given by the mouth. Forty-eight hours after the operation the patient was given one-half an ounce of milk and lime water every hour. She left the hospital on the twentieth day. The tumor was entirely of hair, exactly the same color throughout and the same color as the hair on her head. It was about twenty-four inches in length, being about two inches in diameter at one end and gradually tapering to a point at the other; it weighed twenty-three ounces. Dr. Bruce considered this case rare, but offered no solution as to how the hair got into the stomach. There were no evidences of hysteria present in the patient.

The Treatment of Diphtheria Other than with Antitoxin.

Crozier Griffith, Philadelphia, (St. Louis Medical and Surgical Journal. June, 1901):

The author believes it an error to put sole dependence on any one line of treatment and invites consideration of some of the hygienic and medicinal methods upon which we can depend as an aid to diphtheria antitoxin.

Under the head of prophylaxis, he remarks that it is a matter of repeated observation that the germs of the disease can often be found in the throat of a healthy nurse caring for a case of diphtheria.

For their own safety most careful supervision must be kept over both the throats and noses of all the members of the family, and the throats of those unavoidably exposed frequently gargled with antiseptic solutions.

As in many cases the disease begins in, or is confined to, the nose, this region should receive treatment in every case. The solutions may be applied by atomizer, though the syringe is more thorough. The solutions used should be those which check bacterial growth, or act as cleansers only, rather than those distinctly bactericidal, the latter being too powerful to be well borne.

In pharyngeal diphtheria solutions may be applied to the pharynx by the syringe, a swab or a brush. The author favors for this purpose a solution of hydrogen peroxide in full strength or slightly diluted, and immediately follows it with Loffler's solution on a swab and held upon the affected parts for a few seconds.

In laryngeal diphtheria the local treatment must be largely by inhalation, and the most useful remedy is steam. It is very important that *enough* vapor be generated. Either the room must be kept full of vapor by plunging red-hot iron, not bricks, etc., into tubs of shallow water, or the child must be surrounded by a croup tent and the air within it kept moist by a steam atomizer or a croup kettle. Home-made croup tents can be made by tying a broom-stick upright to each corner of the crib, connecting the tops by cord and throwing blankets over the framework thus made.

The author believes that large doses of alcohol are frequently needed, and are well born.—The Laryngoscope, Sept. 1901.

Amputation Through the Trochanters of the Lower Extremity in a Chinese Coolie.

G. S. Thomson (The Indian Medical Gazette, September, 1901), describes this interesting case that occurred in Pekin. He says:

The patient was brought to the Field Hospital then encamped at the Temple of Heaven, Pekin, on the evening of the 1st of October, 1900, having sustained a severe injury to the left leg about 6 p. m., the same day. It appears that in rolling a very heavy teak log, in company with other workman, he slipped and fell in front of the moving caulk of timber. The skin was torn off from the fold of the left groin to the heel, and hung like a folded bath towel behind the lower half of the thigh, knee-joint, and leg. The both lower bones had been smashed in their lower thirds, and the whole extremity was a quivering mass of muscle yellow fat, shredded tendons, sand, dirt and gravel. The patient was in a state of profound shock and collapse. Pulse barely perceptible, skin cold and clammy, eyes sunken, breathing snatchy and gasping, and he was just conscious.

It was entertained whether we could give an injection of cocaine 1½ to 2 grains into the spinal column, and thus induce anæsthesia by the newest method; but we found the patient so weak and the danger of sitting him up to give the injection so imminent, that he was given chloroform instead and the limb amputated at once. There was just sufficient skin attached to the posterior and inner aspects of the thigh to furnish a covering flap for the stump sketched out in imagination.

Accordingly, after preparations as for Furneaux Jordan's method, irrigatory cleansing, brandy, morphia, &c., a flap was made by incision down to the bone, the trochanter was then seen through, and whilst Captain W. H. Ogilvie, I.M.S.,

gallantly held the vessels, the tissues on the inside of femur were severed at one swift stroke by incision, the knife being passed between the separate bone. The precaution was taken to identify the removal artery, so that pressure could be applied to it directly; and to ensure the vessel being divided low down in the stump where it was felt pulsating; and this also gave great hope for the vitality of the flaps and the avoidance of subsequent gangrene.

Two vessels were tied, the skin met, almost as one meets the edges of the palms of one's hands, without tension and the patient revived with ether hypodermically and a large water enema containing 20 ounces of good brandy.

Hot bottles were applied, and a plentiful supply of blankets and a sedative and restorative draught administered, and dressings and bandages adjusted, and the patient put to bed with two attendants in constant attendance on him. On the 2nd of October, the notes read, he is doing well, slept five hours, took soup and egg flip, and feels no pain or headache, urine had to be drawn off by rubber catheter. Calomel grs. iv, Pulv. Jalapæ co. grs. xxx given at 9 a. m. On the 3rd he had temperature 101.8 deg. F.; pulse 108; respirator 22, and slept well and had a clean tongue, and passed three motions consciously in the bed-pan. On the 15th the stump was dressed. No pus, very little discharge on the dry dressings noticeable. One stitch rather taut was divided. Temperature 100 deg., pulse 98, respirator 20.

His mother came to see him on the 5th, and was given a subsistence allowance of food for three days. Unfortunately for the best laid schemes of foreign devil surgeons when dealing with the Chinese, we had reckoned on her help to tide him over the reverse he had met with and towards recovery; but she had other notions. The Chinese do object to going into the other world maimed, so this youth of 20 summers was given arsenic by his mother secretly and died at 5:15 a. m., on the 7th of October in spite of western surgical science, having temporarily rescued him from an otherwise certain death.

Captain Moorehead and Captain Ogilvie, I.M.S., very ably assisted during the operation and afterwards. The food left by the patient was given to one of two similar-sized dogs and they were both tied up together; and the one who had partaken of the supected food succumbed that night. The result of this case was very disappointing as it had excited a lot of interest, and was the biggest operation performed during the war in China at Pekin.

Gigli's Latest Modification of Instruments and Technics in Craniectomy with his Wire Saw.

In the Centrablatt fur Chir., Gigli again returns to the great advantages of his wire saw in doing osteoplastic resection of the skull and presents some modification of his instruments and technic well calculated to shorten the duration of the procedure. We possess, he says in the trepine, the chisel and the motor saw, sufficiently rapid means of opening the cranium; but the first does not give large enough opening and sacrifices too much of the bone substance, the chisel causes too much trauma and the motor saw requires a costly and complicated apparatus. The Gigli saw method obviates all those objections, but up to the present he thinks it has not demonstrated itself to be a sufficiently rapid method. He has endeavored to improve the procedure by devising more rapid, and yet safe means of making the openings in the skull, and by so simplyfying the apparatus as to facilitate greatly the passing of the saw.

He has discarded the motor in favor of the trepan, which he has succeeded in making much more effective and rapid, by modifying the apparatus for driving the borer through the bone. Taking the Collin trepaning machine as his starting point he has so improved the machanism as to give a better and firmer hold against the skull and he has substituted for the trepine what is known in Germany as the "American borer," which he has guarded in such fashion as automatically to control its progress through the bone. Furthermore, he has so simplified the means of passing the wire saw under the bone as greatly to diminish their size. This is quite simple. It consists of two metal staffs slightly curved at the lower ends, which, by a mechanism provided for the purpose, may be made to deviate from or approach one another, by turning the staffs on themselves; above is another arrangement for giving tension to the thread, passed through the curved part of each staff, which is hollow for the purpose. By simply turning the two staffs the two curved portions are turned away from one another and the thread is put upon the stretch. This is one part of the apparatus intended to catch the hook on the end of steel wire which passes through a tunneled sound. This sound is so manipulated from the handle that it is not difficult to tell about where it is under the bone after having been passed through the first hole.

The borer is placed over this spot and the hole made. The thread carrier is then introduced with the two staff ends together. Once under, the two ends are separated, the thread

thus put on the stretch and the hook sought. As soon as it is seen, the thread is easily made to catch it and the wire is pulled through. We think this an improvement on his previous methods or any modifications suggested by others, even the watch-spring method of Lauenstein and Podrez, which we have found very useful and helpful in cadaveric osteoplastic craniectomy. Where the openings are not too far apart the danger of wounding the dura while sawing is not great, and this seems to be the only serious traumatism attending the method. A bone flap thus made is far superior to any that can be fashioned by any other plan. By beveling it is so made (and the loss of bone substance by the sawing is so small) that it is impossible for the bone to fall in on to the dura; there is, therefore, no danger of hernia, and the bone appositiion being so accurate, the union is rapid, and the danger of infection reduced to a minimum. —The Indian Lancet, Sept. 2, 1901.

On the Diagnosis of Thoracic and Cardiac Aneurysm by the X-rays.

After mentioning that the greatest value as yet found for the X-rays in diseases of the chest, both as regards diagnosis and perhaps prognosis, and suggesting that it has almost become the duty of the physician to make use of this method of examination in any doubtful case, and mentioning that no two physicians seem to be agreed as to the relative value to be ascribed to the prominent symptoms present in thoracic aneurysms, Dr. Walsham, in the Edinburgh Medical Review, April, 1901, describes the apparatus and the exposure necessary in his opinion for the diagnosis of aneurysms of the descending thoracic aorta, for which he uses the lateral oblique method, giving a three-quarter view of the thorax. By this method two clear zones can be seen, one posterior, corresponding to the posterior mediastinum, bounded below by the convex shadow of the diaphragm, in front by the shadow of the heart, behind by the shadow of the vertebral column, which shadow includes those of the aorta, vena cava, and œsophagus. This is termed the retro-cardiac triangle.

Another triangular space in front of the heart corresponds to the anterior mediastium. Tumors in the spaces can occasionally be seen, and thoracic aneurysms, œsophageal tumors, or enlarged mediastinal glands seen. In the same way that familiarity in the use of the stethoscope, the ophthalmoscope, the laryngoscope, the cystoscope, and all special forms of examination, it is as well to know what the normal condition is like before attempting to interpret the conditions present.

It is not common to obtain a shadow simulating an aneurysm at the junction of the transverse with the descending thoracic aorta, and as in all X-ray examinations it is as well to warn patients that dermatitis may be produced, although this result after exposure is almost a thing of the past, owing to the short exposures now required.

For the diagnosis of an aneurysm the shadow must be in continuity with the heart or aorta, and shadows cast by inter-thoracic growths present quite a different appearance. The shadow of the sac of an aneurysm is more dense than the heart-shadow owing to a great measure to the presence of laminated clot. Without this the shadow is naturally less dense. Considerable importance should be attached to the position of the heart in the chest, as in many cases the heart assumes a transverse position.

Cases of cardiac aneurysm may be diagnosed in the same manner, but owing to the rarity of their occurrence considerable further experience is required before this means of diagnosis can be absolutely relied upon. The exposure necessary for the production of a good skiagram varies in different cases. Fat and muscular subjects require a very much larger exposure than thin and young patients, even when all the conditions are favorable, and the resulting shadow is often only visible to those who are accustomed to the frequent observations of smaller shadows.—Treatment, Vov. 5, No. 7.

Dislocation of Astragalus with Report of a Case.

(B. G. Copeland, M.D., Birmingham, Alabama), the International Journal of Surgery, October, 1901, reports the following interesting case:

H. C. P., aged 45, fell from a trestle. As a result there was an immediate loss of motion in the right ankle, the foot being in the extended position and unmovable, with a protuberance below and to the inner side of the internal malleolus and the accompanying symptoms of a contusion. An ineffectual attempt at reduction had been made by Dr. Oxford on the day previous, and I told the doctor before the patient was anesthetized the second time that, in my opinion, we would have to resort to the knife. This was agreed upon as a last resort, that is, we promised the patient that we would try once more, and if we failed by the ordinary manipulation, we would make an incision and by force replace the displaced bone. Accordingly a similar incision was made, about five inches in length,

exposing the vessels, which were carefully guarded and displaced backward with the tendons, and when the fibrous structures were incised and the bone exposed there was found to be a restoration of the astragalus on its horizontal axis. In other words, the lateral surfaces were looking upward and downward, the trochlear surface to the inner side. My incision producing a compound fracture, several pieces of the outer compact layer of the bone were removed.

Reduction could only be effected by the use of a periosteal elevator, used as a lever to separate the leg and foot, while the astragalus was pulled in position by the means of a sharp retractor. After thoroughly exposing the parts and having all structures directly under the vision, it was plain that even under these circumstances, the correction of this deformity was not easy, and by any other method it was an impossibility. The patient made an uneventful recovery, and to-day, six months after reception of injury, he is unconscious of having ever possessed a lame foot.

Referring again to the first statement made, that is, the early correction of these deformities, I would say that, in my opinion, this rule should be adopted the first time the patient is seen. We will thereby avoid such operations as incision, Symes' amputation, also prolonged recovery from sloughing, and in all cases a permanent cripple. Secondly, the above mentioned bad results are caused by spicula of bone and pressure producing suppuration, etc. Thirdly, drainage through and through the joint was indicated in this instance as in all joint injuries, the drain, of course, being in the most dependent part, and in this case in front of the tendon Achilles. This operation requires a very thorough technique and a large antiseptic dressing, with the application of a plaster-of-Paris splint for the immobilization of the parts.

Caffeine in Carbolic Acid Intoxication.

G. A. Sarraby (British Medical Journal, Sept. 14, 1901): I was called by the police at 1 a. m., on May 5th last to a case of poisoning by apsorption of crude carbolic acid, swallowed about three hours previously.

The patient was a young man, aged 23, an epileptic, who had previously attempted suicide. I found him deeply comatose, the skin being cold, covered with perspiration, and markedly cyanotic. The pupils were somewhat dilated and unaffected by light, the respiration slow, labored, and noisy, the pulse almost imperceptible at the wrist, and he appeared to be in a dying condition. I gave a hypodermic injection of strychnine and one of apomorphine, meanwhile giving oil and glycerine by the mouth. The apomorphine was very slow and feeble in its effect, and did not act till after the stomach had been well washed out with a stomach sipon tube subsequently obtained. The washing smelt of crude carbolic acid, but there did not appear to be any considerable quantity free in the stomach. The coma was so profound that the patient took absolutely no notice of anything done to him, and, in fact, in passing the stomach tube, it entered the larynx, and although it passed down the trachea it excited no coughing.

The strychnine having appearently had no effect in lessening the coma, and profound respiratory and circulatory depression, I considered that as caffeine is added to phenacetin to prevent just such symptoms being caused by the phenyl radicle, so I might find benefit from its administration under these circumstances. I therefore gave a hypodermic injection containing 2½ grs. of caffeine dissolved in water with the aid of sodium salicylate, corresponding to nearly 5 grs. of caffeine-sodium salicylate.

In about an hour the patient's condition was improved, although he was still unconscious. I therefore gave him another hypodermic dose of caffeine of the same strength as before, and this time he made some slight reflex movements when the skin of the chest was pierced by the needle. In about half an hour he had so far improved that I judged it safe to have him removed to the German Hospital. On the way there he recovered consciousness sufficiently to speak loudly, and although I am informed that his condition remained precarious during the day, he made an uninterrupted recovery.

It is perhaps too much to draw definite conclusions from an individual instance; but I certainly think it probable that the caffeine had a considerable influence in combating the toxic effects of the phenol and cresols absorbed, which in this case constituted the principal danger, the amount of caustic action from the acid being apparently small. I have been unable to find any reference to the use of caffeine as an antidote in carbolic acid intoxication.

The Topography of the Vermiform Appendix.

Muller (Centralbl. f. Chir., No. 27, 1901) discusses the topographical anatomy of the vermiform appendix with regard to the difficulties so often experienced in finding this organ during the operation of resection after one or more attacks of appendicitis. The insertion of the appendix, it is pointed out, corresponds to that part of the cæcum where the three longitudinal

bands meet. The situation of this meeting point varies in different subjects. It is found sometimes on the anterior, at other times on the posterior wall of the cæcum, and at a variable distance from the insertion of the ileum. Where, however, the three descending longitudinal bands come together there will always be found the cæcal attachment of the appendix. As a guide to the seat of this attachment the well-marked and conspicuous band in front of the cæcum is preferable to either of the other two bands. In operating in a case in which there is difficulty in finding the appendix the surgeon should look for the anterior band, and when he has found this, take it as a guide and follow it through adhesions and old exudation in the direction of the appendical attachment. By doing this with care and patience he will not fail, the author states, to reach the desired object however extensive the adhesions may be. When the proximal extremity of the appendix has been found and detached from adhesions, the release and exposure of the rest of the organ will be found in most cases free from difficulty. The situation of the terminal portion of the appendix becomes a matter of relatively slight importance when the chief difficulty of the dissection has been overcome. This help, may, it is stated, fail in cases in which the appendix has been detached from the caecum in consequence of suppuration, but even then the direction of the longitudinal band will indicate the situation of the separated structure. The author, in conclusion, states that he has never failed, even in spite of old and very dense adhesions, to distinguish and expose the muscular band and to utilize it as an efficient guide.—British Medical Journal, Sept. 14, 1901.

Intramuscular Injections in Syphilis

In pleading for a more general use of intramuscular injections of mercurial salts for syphilis, Max Stern points out that treatment by inunction and by internal administration of mercury has a great many drawbacks, (British Medical Journal, Aug. 24, 1901). The former is dirty, does not admit of exact dosage, acts irregularly, and, if left to the patients or patients' attendants, is rarely carried out satisfactorily. He gives a brief historic survey of the injection treatment, which dates back to John Hunter, and was at first practiced as subcutaneous then as intramuscular, and more recently (by Baccelli) as intravenous injections. The latter method is too dangeous to be introduced into daily practice. In favor of the intramuscular method, he states that it is certain in its action, the absorption is quicker than by other methods, and its application is clean; further, one can be certain of the exact dose of the salt which is absorbed. The condition of the skin has no influence on the rate of absorption, as with inunction, and he lays great stress upon the fact that in advanced age, and in cases complicated with eczema, psoriasis, prurigo, ichthyosis, etc., the inunction treatment cannot be carried out at all. Its drawbacks consist in the possibility of local disturbances, which, however, are rarely severe. The intramuscular method can be carried out by means of soluble or insoluble salts of mercury. Of the former, calomel in oil emulsion, hydrarg. salicylic. in paraffin emulsion, ol. cinereum and thymol mercury are the most usual preparations. Of the latter, the perchloride, the peptonate, the cyanate and hydrarg. benzoicum are among the best. The latter class has the advantage over the former—that the dose can be more exactly determined. He (Stern) considers that the statement that the insoluble salts are gradually absorbed, and therefore protect the organism against an overdose, is questionable, since there is evidence that the insoluble salts at times collects and suddenly give rise to dangerous or even fatal poisoning. He further has experienced that the action is much more rapid with soluble salts. He gives reasons for preferring hydrarg. perchl., which he uses in a 1 per cent. solution for women and 2 per cent. for men, and to this he adds 45 grs. (90 grs. for men) of sodium chloride. The injection is carried out with a well-built glass and metal syringe, and with an ordinary needle. This is to be carefully sterilized, and the site of injection (gluteal region) is carefully disinfected. The needle is then inserted quickly and deeply at right angles to the skin into the muscular tissues. The syringe is detached, and if any blood flows out of the needle another site must be chosen. The fluid is then slowly injected. He describes some cases in which this method acted with remarkable certainty and rapidity after other methods had given unsatisfactory results. In conclusion, he sums up thus: The intramuscular injections should be used (1) when the pathological or other condition of the skin or digestive organs render inunction or pills inadvisable; (2) in severe syphilis, when important organs are attacked, and rapid and energetic treatment is called for; (3) when one wishes to clear up a doubtful diagnosis; (4) when other means have already given unsatifactory results; and (5) alternately with other methods in the intermittent form of treatment.

The Active Principle of the Suprerenal Gland

At the recent meeting of the Mississippi Valley Medical Association, held at Put-in-Bay, Ohio, there was an interesting discussion in regard to the uses of the active principles of the Suprerenal Gland. It was introduced by Dr. Jokichi Takamine, the well known Japanese-American chemist, who described how he had first discovered the method of isolating the active principle from the gland, and likewise gave a detailed account of the process by which it is manufactured for medical use.

In the course of his remarks, he said that the therapeutic applications of adrenalin, as the active principle in question is called, are already numerous, and that new uses for it are continually being found by investigators. Generally speaking when locally applied, it is the most powerful astringent and hemostatic known—being more than one thousand times as strong as the fresh gland. It is useful in all forms of inflammation, and is the strongest stimulant of the heart. It is non-irritating, non-poisonous, non-cumulative, and without injurious properties. It has been used with good results as an antidote in morphine and opium poisoning, in circulatory failure, in the prevention of collapse, in anesthesia, and in allied conditions. It is invaluable in carrying out bloodless operations in nose, eye, ear, and throat work. It has also given good results in some cases of deafness hay fever, nasal hemorrhage, and various forms of heart disease. Such authorities as Doctors Mayer, Wilson, Bates, Reichert, Ingals, Stucky, Johnson, Chambers, Curtis, Swain, and many others, have reported very favorable results.

Dr. Carolus M. Cobb, Boston, said he had used adrenalin extensively in cases of vaso-motor rhinitis, and particularly that form of the malady which was commonly known as hay fever. It had many advantages as compared with the fresh suprerenal gland, which was open to objection because it had always to be made fresh, was of more or less uncertain strength, and was sure to break down and be disagreeable. He had used adrenalin as a spray, and also as an ointment, consisting of a gramme of adrenalin in an ounce of vaseline. The latter the patient could apply himself, and it worked beautifully. With the proper use of adrenalin in these forms it was possible so to treat hay fever of the autumnal variety that patients could be rendered so comfortable as to be able to live about where they chose and do very much as they chose. It certainly worked marvellously, and it kept well in the ointment as well as in solution.

Dr. John North, Toledo, Ohio, thought the profession were very much indebted to Dr. Takamine for the preparation of this extract. He had used it from the very first, the manufacturers having sent him some samples when it was brought out. The results he had obtained with it were highly satisfactory. It enabled him to perform operations on the nose without drawing enough blood to do more than stain the instrument. Sometimes there were not more than a drop or two produced in removing a spur from the septum. As to secondary hemorrhage, it was not more apt to come on with this preparation than when the fresh gland was used. He had never had a case of severe nasal hemorrhage after using it; and in one case he had by its means arrested a hemorrhage which he had tried in vain to stop by plugging and other devices. He had also had satisfactory experience with adrenalin in the treatment of hay fever. He would like to say more about the preparation, but time did not permit.

Dr. George W. McCaskey, Fort Wayne, Ind., said his experience with adrenalin had been somewhat limited; but he had obtained good results from its internal administration. He had seen the heart drop from 20 to 25 beats a minute through its influence.

The Chairman (Dr. Chas. F. McGahan, Aiken, S. C.,) said he had had a great deal of experience with the preparation since it came out, and so far he had not found anything in its action which did not call for extreme satifaction. He had heard a good deal of praise of it too from other practitioners. There was one case of a remarkable character which he understood the doctor who had charge of it intended to write up, and therefore he would not mentionh is name. It was that of a patient residing in Washington who had a troublesome growth or gathering at the top of the larynx. Two of the best nose and throat physicians in Washington came to the conclusion that it was a malignant affection, and it was thought the patient had not long to live. Under the circumstances, the physician in attendance thought there could be no harm in spraying it with adrenalin which he did in the hope that it would afford some temporary relief. The result was that the gathering disappeared, and the patient had gone to Atlantic City and was doing well. Dr. McGahan added that he himself had used adrenalin a great deal in nose and throat work, and he could corroborate all Dr. North had said as to the bloodless character of the operation it rendered possible. His usual procedure,

after he got the nose open and clear, was to put in some oily solution; and then he gave the patient a weak solution of adrenalin 1:5,000 or 1:19,000 with which to spray himself at home. In his part of the country they did not cure all their patients with iodide of potassium, as one of the speakers in a previous discussion claimed that he did in Florida; but they always succeeded in giving their patients relief, and then they proceeded to see how they could prevent a recurrence of the disease. Adrenalin was of great aid to them enabling them as it did to make bloodless operations and clear out the nasal cavities; after which an oily solution was applied, and the patients were in a condition to enjoy a comfortable night's rest.

Dr. Moyer.—It is better in all cases than the suprerenal gland?

Dr. McGahan—yes, because it is simply the extract of the gland minus impurities.

Quoting Foreign Authorities.

Some of our American physicians seem to have a mania for quotidg foreign authorities in connection with the diagnosis and treatment of a large number of effections, and particularly those affections which require surgical interference. To us this seems not only poor taste, but displays either a lack of appreciation of the scientific work that is being done in this country, or ignorance of it. The time has passed when it is necessary to look to foreign countries for points in the diagnosis and treatment of diseases, for nowhere on earth can there be found a more progressive and highly scientific class of medical men than can be found in America.

It is a well known fact that some of the more important surgical operations that today are recognised as the standard treatment for certain affections, have not only had their origin, but perfection in the United States, and particularly is this true in appendicitis. The disease was first investigated by an American physician and the treatment was instituted by an American surgeon. It was some years after the operation was a common one in America before foreign physicians and surgeons would acknowledge that the disease existed. As one of our confreres says, "One becomes quite accustomed to reading French or German articles in which an entire ignorance of American work is shown, but it seems to me that it is a pity that an American physician writing at this time should seek foreign authority for illlustrating any pont in the diagnosis or treatment of appendicitis." What is true of appendicits is also of a number of other surgical affections which were first treated in the United States, and the credit for the perfection of the operation belongs entirely to American surgeons.

There was also a time when every physician and surgeon thought that it was necessary for him to spend a year or two abroad in order to obtain advanced ideas and methods regarding the diagnosis and treatment of disease. It is now a recognized fact that no man need go beyond the shores of the United States in order to acquaint himself with all of the best and latest knowledge pertaining to the medical profession. It is, of course, admitted that a trip to the large medical centres of Europe, after seeing and learning the work that is being done in this country, broadens and develops a man for his professional career, but that he thus secures any better advantage than can be obtained in the United States is not recognized by those who are in a position to know. It is yet a fad, and in some instances and advertising scheme on the part of the physician, to spend from a few weeks to a few years in some of the foreign medical centers, but the intelligent and more progressive of those who indulge in this practice frankly admit that the benifits derived are in no respect better, and in a great many instances less than can be secured in this country. We have no desire to discourage study and observation in the foreign medical centers, but we do believe that is high time that many of our physiciang cease to credit the medical profession of foreign countries with being so far in advance of us. The facts do not warrant the assumption that in any country on earth there is more intelligence or enterprise and progression in the medical profession than in America.—*Fort Wayne Medical Journal.*

Insoluble Capsules and Appendicitis.

Capsules, coated pills, and similar elegant products of modern pharmacy often prove to be far less soluble than intended, so that they are passed in the motions more or less entire. Dr. L. O. Polak of Brooklyn records a case in which a capsule became impacted in the appendix vermiformis. A woman, 54 years of age, had suffered when about 46, from acute obstruction, apparently intussusception. There was persistent pain in the left side, which latterly became severe. Dr. Polak found that massage, rectal irrigation, and the interral administration of anti-septics relieved her. As there was deficient secretion of bile he administered ox-gall, pancreatin, salol, and ichthyol in capsules. About forty-eight hours after the first dose the patient had a severe attack of pain in the right side with

tenderness over the site of the appendix. Inflammation of the appendix was diagnosed, and the diagnosis was confirmed by operation. The appendix was removed, it showed no sign of perforation, but contained a capsule. The gelatine coating had dissolved, but the contents had reached the large intestine undissolved; they are certainly not intended to go intact so far down the alimentary canal.—*British Medical Journal*, Sept., 21, 1901.

The Bactericidal Power of Bile.

S. Talma, as the result of a series of experiments conducted mainly by injecting various forms of bacteria into the gall bladders of rabbits concludes that bile contains some constituent having a distinctly inhibiting effect on the growth of most colon, typhoid, and diphtheria bacilli. The susceptibility of various types of organisms to these substances is very variable, and the degree of virulence in the generally used sense is not a measure of infectiousness for the gall passages. The resisting power of the bile is also an uncertain quantity, and at different times and in different animals varying grades of bactericidal power are exhibited. The number of the invading organisms is of great importance in determining their fate, and the epithelium of the gall passages and the liver cells themselves oppose powerful resistance to their penetration, especially in the case of the diphtheria bacillus,—*Medical Record.*

Koch Criticised.

As was to be expected, a great "hurrah" has risen about the caes of Professor Koch, and the unkindest cut of all is the claim that an American, studying out in Texas in 1898, showed that there is a dissimilarity between human and bovinine tuberculosis. But Dr. Theobald Smith, like Professor Koch, has been unable to absolutely demonstrate that the bovinine tuberculosis is not communicable to man. Until such time state boards and the people generally would better be wary of the use of infected milk and meat. Rather trust to the belief of the past, which have borne us in safety, than to lean upon an opinion which, after all, may prove to be a broken reed.—*Milwaukee Medical Journal*, Aug., 1901.

Oleaginous Science.

There have been many reported "strikes" in oil, and now it is asserted by some scientist that petroleum is really a distilled and fossil fish oil. Is it possible that Norway cod were really at the bottom of the Standard Oil Company? Who can say? If science says so, one may go on downing the oil, but there is no downing science.

Hagee evidently believes in science and in oil in the same breath. In any event Hagee's Ol. Morrhuae Comp. is the outcome of scientific combination and adaptation. Its formula makes it a food of the greatest value in all wasting diseases and low states.

If there is anything better in the market we shall be glad to herald its virtues.—*The Dietetic and Hygenic Gazette.*

Treatment of Insomnia.

Dr. G. Lyon, (Canada Medical Record Aug., 1901) says that hygienic measures occupy a foremost place. Alcohol, tea, coffee and tobacco should be stopped, and the diet regulated. It is unwise to permit such patients to eat too heartily, and all foods which have been found to digest slowly should be avoided. This is of importance, as patients should not be permitted to sleep while digestion is going on. The temperature of the sleeping room should not be above 60 deg., F. It is inadvisable to have a fire in the room, and the windows should be open. From the standpoint of medicinal treatment he recommends for simple insomnia trional, chloralose, urethane, amylene hydrate and somnal. In conditions accompanied with fever potassium bromide with a small amount of morphine is one of the best hypnotics. In insomnia from pain he recommends morphine hypodermatically, chloral, combined with morphine and hypnal, being analgesic from the antipyrine it contains. In certain special forms of insomnia definite medication is advisable; thus for tertiary syphilis potassium iodide is of more value than hyphotics; in cardiac diseases, circulatory remedies; in paludal poisoning, vuinine sulphate; in Bright's disease, a milk diet; in tuberculosis, morphine is of more value, and in insomnia of dyspeptics, dietary regimen.

A Case of Severe Mastoid Neuralgia.

John Dunn, (The Virginia Medical Semi-Monthly, April 12, 1901). Severe neuralgia of the mastoid is met with from time to time; it may be reflex or strictly local in character; it may exist either with or without visible concomitant conditions to suggest its cause; generally, there is a history of a more or less remote, acute—be it purulent or catarrhal—inflammation of the middle ear and its annexed antrum, the neuralgia appearing afterwards when the patient takes cold; it sometimes complicates simple abscesses of the attic or acute empyema of the mastoid antrum and forces

the surgeon to explore the mastoid, although in similar cases, without this neuralgia, he is satisfied with opening Schrapnell's membrane; it is in many, if not most instances, uncontrollable by other than surgical means, which consist in all save the cases with a reflex origin for the neuralgia in opening the mastoid process, to which it readily yields in nearly all cases. In some cases, after persisting for weeks, the severity gradually subsides; the neuralgia has, however, a tendency to recur each time the patient is exposed to or takes cold. We have no way at present to accurately foretell in what condition we shall find the contents of the mastoid process in these cases. It is well to remove the cortex over an area one-third to half an inch wide, extending from the region of the fossa to the tip before mutilating the cells that we may in each case examine them carefully. The external incisions, unless we find contra-indications, should be closed by sutures at the time of the operation.

Nephrectomy in Cases of Hydatid Cyst of the Kidney.

Albarran (Bull. et Mém. de la Soc. de Chir., No. 21, 1901) reports a case of renal hydatid cyst in which he was led by the thickness of the walls and the almost complete destruction of the kidney, both by direct invasion and by compression, to perform lumbar nephrectomy. In consequence of the extensive and firm adhesions of the sac to surrounding structures, both the abdominal cavity and the left pleural cavity were opened in the course of the operation. The patient, a woman, aged 33 years, made a good recovery. The author holds that nephrectomy is indicated in certain cases of hydatid cyst of the kidney. When the affected organ is so far destroyed as to be quite incapable of performing its function and when the anatomical conditions are not unfavorable to extirpation this operation, it is believed, is preferable to nephrostomy, The lumbar method should in such cases always be practised. The mortality of the transperitoneal operation for removal of a renal hydatid cyst has been very high, whilst lumbar nephrectomy has proved successful in all four cases of this disease in which it has hitherto been practised, Delbet's operation of removing the cyst and closing the gap in the affected organ is inapplicable in the most cases of renal hydatid cyst, by reason of the thickness and the calcified condition of the wall of the sac. In hydatid disease of the kidney the affected organ is destroyed, not only by direct invasion of the cyst, but also by hydronephrosis resulting from compression or displacement o the ureter, or by obstruction of the ureter, and pelvis. Under such circumstances nephrostomy might result in suppuration and the retained kidney, quite useless with regard to function, might become a source of serious septic mischief.—*British Medical Journal*, Sept., 14, 1901.

The Toxic Origin of Brain Disease.

If it be true that the intestinal canal, with its varied microbial flora, is the real starting-point of such serious organic diseases as general paralysis and tabes dorsalis, there must be a time, if we did but know it, when the old-fashioned purging and starvation might possibly have exercised these evil microbes. It has long been a formula with some schoolmasters that when a boy turns non-receptive the best plan is to give him a dose of castor oil. Even Mr. Squeers, says the "Hospital," found that a mixture of brimstone and treacle was not without effect in restoring harmony when his scholars proved rebellious, and if the auto-intoxication theory, which is now coming so much into prominence, is to be accepted perhaps they were not altogether wrong. Whether the good old Friday fast is not an even better means of maintaining health of body and equability of mind is another question. At any rate the more we see of the dangers which may arise from our interiors being turned by excess of food into fermenting bacteria beds, the more convinced we become of the advantages of combining high thinking with plain living. For years we have been told that the increase of general paralysis has been due to the overstrain of the nervous system to which civilized people are exposed. Perhaps it may turn out to be due to their over-feeding and their ill-regulated interiors. At the least this hypothesis is a more hopeful one than that which suggests that if we will be civilised we must put up with a growing percentage of broken-down nervous system.

The Gynæcology of Appendicitis.

Brandt (Norsk Mag. f. Laegevid, 1901) describes 13 operations on women for chronic appendicitis, all successful. In 2 of the same cases cholecystomy was performed at the same time for gall stones. Three of the patients had been subject for years to severe dysmenorrhœa. The symptoms completely disappeared, which Brandt considers remarkable, as there were no adhesions between the appendix and the tubes and ovaries, nor was any neurosis present. One patient underwent removal of her appendix in the sixth month of pregnancy

owing to recurrent inflammation, which made her very ill. The bulky uterus was much in the way of the operator. The patient recovered and was delivered spontaneously at term. In two similar cases where the patient was pregnant, the appendix, less severely affected, was not removed till after the delivery and convalescence from the puerperium.

Treatment of Membranous Enteritis.

In an editorial which appears in the June 29th number of the Journal of the American Medical Association, the following treatment is recommended in cases of mucous colitis. The treatment should be directed toward correcting dietetic errors and relieving the constipation which is so common in this disorder. Substances rich in cellulose are beneficial for this condition. Mild enemata with simple infusions of warm water or with the addition of sodium chloride, sodium bicarbonate, Carlsbad salt, or aromatics, may be given. Injections of oil also give relief. For improvement of nutrition, starches and fats should be added to the dietary. The state of the nervous system should be improved by exercise, gymnastics, hydriatic measures, and the like, and a partial or complete rest cure may be valuable.

Some Uses of Sulphur.

W. O. Aunnell (Med. Council) mentions a number of conditions in which he finds sulphur useful. It is one of the best stimulants to the sexual organs; it is valuable in constipation; it is one of the best remedies for hemorrhoids; in ulceration of the anus it should be used internally and externally (1 dram sulphur to 1 ounce lard). It is good in incontinence of urine, chronic catarrh of the bladder, and in all sexual weakness. It is useful in amenorrhea when the patient is anemic, and in chronic rheumatism and dyspepsia, when the patient is scrofulous. In bronchitis with offensive expectoration, or nasal catarrh, when the discharge is very offensive, it may be given several times a day. It may be given in scrofulous diseases of the joints, and in scrofulous ophthalmia. It is useful in all skin diseases when the eruption is of a parastic origin. It is a sure cure for scabies in the following formula:

Sulphur	oz. 1
Potassium carbonate	dr. 2
Lard	oz. 5

M. Sig.—Anoint the parts two or four times per day after having cleansed them with soap and water.

As a local application it is very good in diphtheria, being blown or dusted upon the membrane. If sulphur is burned in a room it will usually kill the germs of the disease present. In obstinate cases of skin disease, when the surface is torpid and inactive, and internal remedies do not give good results, give the patient a sulphur bath. Put him in a thick-bottomed chair, having a frame to support an awning for the body, place a hot iron under the chair and sprinkle it with sulphur, allowing the fumes to envelop the body.

It forms the basis of an excellent hair tonic that has stood the test of long usage. It is made up and used as follows:

Milk of sulphur,	dr. 1
Oil bergamot,	gtt. 10
Triturate well, then add	
Glycerin,	dr. 2
Triturate well, then add	
Rose water.	oz. 20

M. Sig.—Apply with a soft sponge once a day. This will produce growth if the follicles are not dead.

It is the best alterative we have in scrofula. Use sulphur ointment in all slow healing ulcers with an offensive discharge. —*Pacific Medical Journal, Sept., 1901.*

Appendicitis and Morphine.

It is a quite generally accepted rule that morphine is not to be given during attacks of appendicitis for fear of masking the symptoms. There is no doubt that this constitutes a real danger, yet there are certain exceptions to what is otherwise a good rule to follow. If the diagnosis has been made early, and for any reason it is decided to delay operation, it is certainly best to give enough morphine to slightly ease the pain, providing the patient and his friends are made to realize that the cessation or mitigation of pain does not mean that there is an improvement. Again, in cases in which the bowels act fairly well, and in which an operation is refused by the patient, lessening the pain with a moderate amount of morphine is clearly indicated, while the diminution of peristalsis must do a good deal towards keeping the inflamed parts at rest. As a matter of fact, it is more than probable that in the so-called medical treatment of appendicitis some form of opium constitutes a most important part of the therapy. It is to be avoided when the practitioner is undecided whether to operate or not, or when the patient's consent to a surgical procedure is not yet obtained. It is probable that in the hands of a careful observer, of one who does not depend upon pain alone for a diagnosis, its prudent use is indicated, and this notwith-

standing the fact, in less skillful hands, it has unquestionably brought about many fatal results.—*Pacific Medical Journal, Sept., 1901.*

Germiletum.

The Dios Chemical Co., of St. Louis, Mo., who are so favorably known to the profession as manufacturers of Dioviburnia and Neurosine and other products exclusively for the doctors to prescribe, have after years of experimenting produced a New Antiseptic under the name of Germiletum, (opposed to germ life) believing the doctors of Medicine and Dentistry fully realize the necessity of an Antiseptic, Germicide and Disinfectant, without any acid reaction—slightly alkaline

Germiletum being slightly alkaline with no acid reaction, the profession will readily recognize that in Germiletum they have an Antiseptic, Germicide, Deodoriser and Disinfectant superior to any other. Whereas the Dios Company have manufactured specialties only for physicians to prescribe, the profession may continue to rest assured that all the out-puts of their Laboratory will be unexcelled in efficiency. Germiletum is put up in handsome tri-angular bottles of 3 oz. and 14 oz, size. Advertisement of Germiletum is in this number for the first time. We bespeak for Germiletum a favorable consideration.

Civilisation and Disease.

One can hardly have a doubt that many of the diseases with which man is afflicted are connected in some more or less vague and mysterious manner with the food he eats. It is the penalty we pay for being guided by intellect rather than instinct. In the course of age, by dint of the stability of their surroundings, animals develop an instinct in regard to their food, which tells them unerringly what to eat and what to avoid. Man, however, is always surrounding himself with new conditions. Looking at the matter from a purley evolutionary standpoint the wonder is that he survives at all. To heat and cold, to tropics and to arctic reigions he tries to accustom himself, while as regards diet he takes his chance at all that offers. Meat vegetables, fruits and nuts. fish and fowl; fresh, preserved, dried in the sun, baked in ovens boiled down and condensed, sealed up in tins and jars of every description, and in latter years pickled in every deleterious anti-septic that the ingenuity of the chemist can invent. We need hardly wonder then that man is somewhat less hardy than animals which are more perfectly fitted to their more stabled enviroment, and that the complete alteration of all the conditions of man's life which have been suddenly introduced by the invention of the steam engine —by which not only is man carried rapidly to all parts of the world, but the products of all parts of the world are brought to man and placed without more ado upon his breakfast table—should have had the effect of strewing man's trail with a considerable number of failures losses from consumption from insanity, from fevers of all kinds, and from cancer. Whatever may the immediate cause of cancer we can hardly doubt that it has of late years shown a tendency to increase, or that this increase has especially affected the "progressive" nations, those in which all the old habits and associations, especially in regard to locality and food, have been subjected to a violent process of topsy-turveydom. The old natural conditions in the midst of which different men and different races grew up each in his or its own native air have been shaken up, and injurious influence which in former times might have affected villages or small communities, or might by their deleterious effects have mapped out certain districts as unfit for human habitation, have been so widely spread by trucks and steamships as to introduce new and unknown conditions into the lives of thousands in distant parts of the world, conditions against which man, whose intellect has to a large extent destroyed his instinct, has not natural protection of that "brute instinc" which is the attribute of the animal creation in a state of nature.—*The Hospital*, Sept. 21, 1901.

The Nutritive Value of Alcohol.

Two experienced investigators have lately given to the world their conclusions on the subject of the nutritive value of alcohol, and unfortunately the two conclusions are absolutely contradictory. R. O. Neumann in the issue of the Munchener Medicinische Wochenschrift of July 2nd, considers that there can be absolutely no question as to the nutritive value of alcohol, and, in his opinion, alcohol is a true food. On the other hand, H. J. Beyer. in the Boston Medical and Surgical Journal of August 22nd, proclaims his conclusion that alcohol has no nutritive value whatever, but, on the contrary, that it causes an abnormal destruction of the proto-plasmic constituents of the body. He recommends its use only for the sake of its temporary stimulant effects in cases of extreme fatigue. Beyer bases his findings on the experience he had with five battalions of infantry and 2,300 collies manœuvring under a tropical sun in a country infested by malaria, the issue of alcohol having been withheld

throught the duration of the expedition, which lasted five months. The conclusion of Neumann are founded upon the results of certain experiments to which he submitted himself. The results of his experiments were practically the same, demonstrating that alcohol is a true food, although not capable of taking the place of fat in every respect. From an examination of Neumann's experiment it is difficult to deny the albumin-saving property of alcohol, and his views have received full support from some personal experiments carried out by Clopatt, and set forth in the Scandinavian Archives of Physoilogy, Nos. 5 and 6 of this year. It must be clearly understood, however, that, although, according to Neumann and Clopatt, alcohol has an alimentary *role*, it must not be recommended for use as such, because it is also a poison when taken in what in ordinary language is termed moderate quantities. There are a sufficient number of scientific arguments against the abuse of alcohol without absolutely denying that alcohol is a food, because, in the face of modern research, this would certainly appear to be proven.—*Medical Press and Circular*, Sept. 18, 1901.

Typhoid Bacilluria.

It is only recently that the possibility of enteric fever being spread by the urine of those suffering from that disease has been recognised, and even yet the full significance can hardly be said to be properly appreciated. In the September number of the Edinburg Medical Journal Dr. C. J Lewis contributes a very interesting paper embodying the results of his investigations in the subject. If the bacillus typhosus is found in the urine in an active state it becomes a matter of the greatest importance that this should be sterilised as carefully as the fæces if we are to prevent the spread of the disease. The condition is not easily recognised, since, as a rule, there are no symptoms connected with the urinary apparatus. In a typical case of typhoid bacilluria there is little or no frequency of micturition, no discomfort in the region of the bladder; the urine is acid when freshly passed, and contains large numbers of typhoid bacilli in pure culture with some pus cells and no albumen. The condition is rarely present in the early stages of the fever, usually not appearing till the third week, and then may continue for a varying length of time sometimes even till well on into convalescence. Occasionally it does not begin till convalescence is established, and then may last for a long time. The question of the frequency of its occurrence is far from settled, some writers estimating it at 25 per. cent. others at 6 per cent. or less. As regards diagnosis the only method is careful and frequent examination of the urine. Any cloudiness of acid urine especially if it appear suddenly, should excite suspicion, and microscopic examination will demonstrate actively motile bacilli with some pus cells if the organism be present. If fresh acid urine, examined directly it is passed, is found to contain organisms, then bacilluria may be fairly certainly diagnosed. As regards the treatment Dr Lewis reccommends urotropin in ten-grain doses three times a day for two or three days, since this drug is supposed to be excreted by the kidneys as formalin, which has a powerful germicidal action. The best method of disinfecting the urine after is is passed is by heat, but carbolic acid 1-20 or perchloride of mercury 1-1000, if throughly mixed with the urine and allowed to stand for half an hour, is said to be efficient.—*Medical Press and Circular*, Sept 18, 1901.

Bacteriological Diagnosis of Typhoid Fever.

Scholz and (Kraufe Ztscher.f. klin. Med.) give their results with some of the bacteriological methods employed in the diagnosis of the typhoid fever. Scholz considers that the Widal reaction is of little value in early diagnosis. He bases his conclusions upon the investigation of only fifty-five cases, forty-seven of which were positive and eight negative. Among the positive cases there were three in which the reaction appeared only after five weeks. Among the negative cases there were two in which the last test for the reaction was made on the ninth day; in two others it was sought for on the eighteenth and twenty-fifth days, but in the remaining four the test proved negative, when undertaken between the sixty-second and the one hundred and sixth days. Krause found characteristic bacilli in the typhoid skin spots in fourteen out of sixteen cases, and considers this a more importat method of examination than the Widal test, as five cases which showed bacilli in the spots showed no agglutintation. He found that the bacilli may disappear from the spots within three to five days after the appearance of the spots, and that several spots should be examined, as bacilli may be absent from some of them. Media are inoculated from the spots after several moderately deep incision into them are made, and their surface scraped. He also studied Piorkowski's method of inoculating a urine gelatin medium with the stools of suspected cases. He investigated nineteen cases,

making in all 123 tests. He got a positive result in three-fourths of these cases, and failed to find the bacilli in four cases only. The appearances of plate culture alone are insufficient, and the usual chemical and biological tests for verification must be employed. He found that the method could be more easily carried out if the urine were inoculated with the Micrococcus ureœ and kept in a thermostat for from twenty-four to forty-eight hours. The medium becomes fluid easily, and is not suitable for summer temperature. He thinks that this culture medium is a valuable addition to bacteriological methods, but that its diagnostic value is much more limited.—*Indian Medical Record.*

Tuberculous Rheumatism or Pseudo-Rheumatism of Bacillary Origin.

In a paper read before the French Academy of Medicine on July 23rd, Antonin Poucet describes three cases in which tuberculous rheumatism was the only possible diagnosis (Lyon Medical, July 28th, 1901) His first patient, a bricklayer, 44 years of age had had no illness till 4 years before admission into hospital. He then suffered from suppurative epididymitis without appreciable cause. A year later he had an attack of bronchitis, which was associated with left pleurisy,and eight months before admission he suffered from pain and swelling in several joints, the swelling disappearing in eight or ten days but the pain persisting in the lumbar region and right hip. On admission examination showed Pott's disease at the site of fifth lumbar vertebra, with right iliac abscess and plastic inflammation of the right hip-joint. In the second case, a woman, 45 years old, who suffered from old-standing phthisis, was suddenly attacked with acute multiple arthrititis. The attack subsided in a week leaving a fungus suppurating osteo-arthritis of the articulation between the first and second phalanges of the right medius. The secretion from this joint inoculated into guinea-pigs caused definite tuberculosis. Other small joints were involved to a less extent. Third case was still more important, since the patient died in hospital and a necropsy was made. A woman, aged 63, the subject of advanced phthisis, suffered from acute multiple arthritis eighteen months before death. A fungous suppurative inflammation persisted in the right ankle joint with lesser changes in most of the other articulations of the limbs. Inoculations made from several of the joints gave positive results. At the necropsy, tuberculous broncho-pneumonia was found. The cartilages of the right tibiotarsal joint were ulcerated. Non-suppurative osteo-arthritis was marked in the right thumb joint and the right elbow and shoulder.—*British Medical Journal* Sept. 21, 1901.

An Iodoform "Stopping" for Cavities in Bone.

Hackmann (Wien. klin. Woch., May 30th, 1901) recommends that all cavities left in bones after removal of sequestra or scraping tuberculous foci should be filled with von Mosetig-Moorhof's "stopping." This consists of iodoform 60 or 30 parts, spermaceti 40 parts, and oil of sesamum 20 parts. It acts as an anti-septic and stimulates the process of granulation. In order to melt this mass and keep it in a liquid condition until is required, a special "thermophore" has been devised. The previous sterilised mass is contained in a wide-necked bottle, which is placed in a metal cylinder containing acetate of sodium, paraffin, and glycerine. The whole apparatus is placed in boiling water for ten minutes, the acetate of sodium melts in its own water of crystallisation, and as it slowly recrystallises gives out the heat absorbed in melting, and so keeps the idoform mass at a temperature of 131 deg. F. for at least an hour. After the cavity is cleansed and sterilised as far as possible it is filled with the melted iodoform mass, which permeats every nook and crevice, and then solidifies. Radiographs show that the mass is absorbed *pari passu* with the growth of new tissue, and that it does not disappear until the cavity is completely filled with healthy granulations. The advantages of filling bony defects with an aseptic and stimulating material are that no suppuration occurs in the cavity, healing by first intention is almost invariable without the acid drainage, the wound requires to be less frequently dressed, and the duration of the treatment is usually shortened. The operation should be performed bloodlessly with Esmarch's bandage, which should not be removed until the iodoform "stopping" has completely solidified.—*British Medical Journal*, Sept. 21, 1901.

A Third Death from Yellow Fever Experiments in Havana.

A third death from yellow fever, resulting from the bite of a mosquito, occurred on August 24th. The victim was Miss Clara Maas, of New Jersey, who succumbed on the seventh day after she was taken ill. Of the six persons bitten by mosquitoes recently in the course of the yellow fever commission's experiment, three have died, while the other three are said to be

suffering from only light attacks of the disease. Miss Maas was a nurse at Las Animas and wished to become immune.—*New York Medical Journal.*

Massage in Sciatica.

R. Judica (Gazz., degli Osped., July 23rd, 1901 discusses the treament of sciatica fully, and concludes that ointment and embrocations, pills and empirical remedies opiates and pallatives of all sorts should be abandoned, and the treatment greatly restricted. Massage must take the first place, and he names three systems: (1) Schreiber's, aiming at a bloodless nerve stretching, by means of passive and active movements, which Judica does not recommend; (2) Ordinary massage, by passive movements slowly done, and increased in amplitude as as the pain will allow, a period of several minutes' rest intervening between each movement; to this should be added small active movements in the recumbent position; (3) The method of Dr. Negro, which Judica strongly recommends. The patient should lie face downwards, with the gluteal muscles entirely relaxed. The thumb is then placed over the point of exit of the nerve from the pelvis, and the strongest possible pressure applied with the aid of the other thumb supperposed; this is maintained for fifteen to twenty seconds, the thumb being slightly moved in all directions laterally, but not raised; after an interval of a few minutes this is repeated. By half a dozen sittings on alternate days a cure is effected even in old-standing cases. Massage should be used in all cases where there is no anatomical condition demanding surgical treatment, and should be used with patience and careful technique. It may be advantagiously supplemented by electricity (applied in various ways) or by hydrotherapy. Surgical intervention is the last resort in desperate cases, and the right treatment in all cases due to special anatomical causes.—British Medical Journal, Sept. 14, 1901.

The Heredity Factor in Disease.

The almost universal knowledge of the general principles underlying the theories concerning the origin of species has undoubtedly caused thinkers to devote their attention largely to the part played by hereditary disposition both in health and disease and both in normal and abnormal physical and mental conditions. As we advance from the lower to the higher manifestations of nature we must notice that the regular order and method becomes more irregular, diverse, and unexpected. One crystal of a salt is exactly similar to another, and behaves with uniformity under similar conditions, but no two plants or animals are exactly identical. When we reach the highest manifestations with which we are acquainted, the workings of the mind of man, the diversity is still greater, and we cannot assure that two brothers, reared under exactly similar circumstances. will not show absolutely opposite dispositions and characteristics.

On the other hand, the physical likeness in one family is frequently well marked, and we are all familiar with numerous instances where some particular disease ravaged a whole clan. But in the scientific and systematic classification of heredity as a cause of disease, the mathematical difficulties are insurmountable. We have several factors to consider. First, the active cause which is usually a germ, or some abnormal chemical condition of the individual condition of the blood. Secondly, the environment of the individual. Under the heading of environment we must place the effects of localities, occupations and sanitary conditions of the home. Thirdly, the powers of resistance may have been weakened by disease or habits prejudicial to health. Lastly, we have the hereditary factor.

In examining a patient we ask carefully for the family history, and, provided he knows enough of the diseases of his relations, in all probability we shall discover an hereditary tendency to phthisis, cancer, gout, alcoholism, insanity, or any other disorder of which we may inquire. Before this evidence is of any value it has to be carefully balanced against the laws of probabilities, when we shall discover that, instead of it being an alarming fact that some cousin died of consumption, it would be a very extraordinary thing if no relation had succumbed to that disease.

Again, supposing a person with an undoubted hereditary tendency to phthisis—where, for example, a parent and one or two brothers or sisters have died from that disease—still it may be possible, by carefully closing his environment, to strengthen the resistance of his organs to the attacks of tubercle baccillus and he may escape the disease altogether. Or again by careful isolation it is conceivable that he would not come into contact with enough germs to occasion infection. These three factors, the active cause, the powers of resistance of the tissues and the environment play so great a part in the determination of tubercular diseases that in all probability the heredity factor will speedily be recognized as but of secondary and subordinate consequence.

In cancer the hereditary tendency has

never been regarded as of such great importance, but we know that if the powers of resistance of the tissues are exhausted by continual irritation, the invasion of the epithelial cells may follow. If the growth of cancer is due to the stimulation of some organism then it is easy to understand that if the powers of resistance of the healthy cells are reduced, they are no longer able to withstand the attack.

When we consider gout the difficulty of attaching any importance to hereditary tendency becomes much greater still. In the first place nearly every one has or has had pains in the joints which were loosely called gout, rheumatic gout, or rheumatism before the distinction between rheumatoid arthritis was recognized. Again, when we remember its pathology, it becomes extremely difficulty to reconcile the presence of an abnormal substance in the blood with an hereditary tendency, particularly when we know that it is due to imperfect digestion and assimilation of the food stuffs.

Mental diseases, again, may be hereditary; but here, also, the law of probabilities must be considered. There is a disposition to link up insanity, crime, and even genius—whatever the term may mean—and regard them all as due to some abnormal condition of the mind. Further, some writers have taken the histories of several families of criminals and proved their descent from persons of unsound mind. The results are certainly very startling, but let us take the history of every drunkard, thief, and prostitute and then see the proportion who have normal relations to those who have not.—The Hospital, Sept. 13, 1901.

The Science of Sensationalism.

Under this title the astute editor of The Practitioner reviews the methods of Koch in his past work, and in his announcement as to bovine on human tuberculosis at the recent London Congress. The following excerpts indicate the opinion of a large portion of the profession:

In his most recent appearance as the sensational dramatist of science, Professor Koch took a new line. As a *coup de theatre* his performance was most successful. It has won for him the plaudits of butchers and dairymen, and the approbation of politicians and parochial authorities who do not wish to be troubled about preventive measures against tuberculosis. He has tickled the ears, but may it not be said that he has made the judicious grieve?

If he felt burdened with the weight of a vital truth, could he not have delivered his message with less of the trumpeting and Oyez! Oyez! of the herald? By his own admission the truth of the message needs confirmation. Was it not therefore an ill-advised proceeding to bawl it from the housetops, so that all might hear? Coming from a man whose statements still carry a large measure of authority, the new doctrine preached by him will be accepted with unquestioning and unreasoning belief by a considerable proportion of the medical profession and by the mass of the laity as the utterance of an oracle. And the oracles of medicine have so often led us astray!

In this very matter of tuberculosis the medical profession has already a serious responsibility to bear for the unrestricted ravages of the disease which were the direct consequence of its rejection of the doctrine of contagiousness, the proofs of which were before its eyes. Professor Koch has, apparently with a light heart, taken upon himself the responsibility of a far larger sacrifice of human lives should his teaching prove to be as futile as his treatment. But if Koch's facts are few and his reasoning rash, there is nothing nebulous about his conclusions. He thinks the risk of infection from milk or flesh of tuberculous cattle a negligible quantity, and he therefore does not deem it advisable to take any measures against it. With this expression of opinion conveyed in a couple of lines, he dismisses the subject as unworthy of further comment.

It is obvious that this deliverance may, if it is widely accepted, have the most momentous consequences. If Koch's teaching is true, it makes waste paper of the Reports of two Royal Commissions; it makes much local legislation nugatory; and it puts countless stones of stumbling in the path of medical officers of health. Of course all this matters nothing if the doctrine is true. But on Koch's own showing it is "not yet absolutely decided, and will not admit of absolute decision to-day or to-morrow." Would it not then have been more prudent in the interests of mankind if Professor Koch had waited till it is absolutely decided before so airily declaring useless precautions based on much stronger evidence than anything he has thought fit to produce in support of his view?—American Medicine, Sept. 28, 1901.

How to Give Mercury.

We have no doubt that the great majority of practitioners habitually give mercury by the mouth in cases where they require the specific action of this drug, as, for example, in the treatment of syphilis, and probably in the great majority of cases they get satisfactory results. At any rate they may do if their patients will pay proper at-

tention to the diet, to the teeth, and to the intestinal tract generally. At the same time cases are met with by no means infrequently in which the results so obtained are not the best possible, and in such the choice often lies between the old plan of inunction and the more recently-introduced method of deep intra-muscular injection. Dr. C. F. Marshall has lately been comparing the advantages and disadvantages of these two methods. The injection method consists of the injection of 10 minims of a solution of sal alembroth (containing one-third of a grain of the salt) deeply into the muscles of the buttock by means of a platinum-iridium needle. The inunction was done with unguentum cinereum, consisting of one part of mercury, one part of lanolin, and half a part of olive oil. About half a drachm of this preparation was rubbed daily into different parts of the body, the rubbing lasting 20 minutes. A warm bath was taken each time before the inunction. From observation of a considerable number of cases which were under treatment in hospital for a year or more, Dr. Marshall concludes that relapses are twice as frequent with the injection treatment as with the inunction method, and in this view he says he is supported by observations on several hundreds of cases which were watched for shorter periods. The great advantages claimed for injection are secrecy, cleanliness, uniformity of dose, and that it is performed by the surgeon himself. Its disadvantages is the pain, but it is said that injections of soziodol of mercury or of Lang's grey oil are less painful than those of the above-mentioned mixture. The great disadvantages of inunction are irksomeness and dirtiness. It would seem, however, to be the more reliable method of the two, and the best to adopt where rapid mercurialisation is required, as in cases of iritis.—The Hospital, Sept. 7, 1901.

The Transmissibility of Human Tuberculosis to Cattle.

In the recent number of the Revue de la Tuberculose, Professor Arloing contributed a critical examination of the views of Prof. Koch on the possibility of the transmission of tuberculous infection, (British Medical Journal, Sept. 21, 1901). He says that Dr. Koch considers that to decide on the alimentary origin of an infection, the infection must be localised and must remain in the intestine. Dr. Arloing considers this criterion too strict. The propagation of the lesion sometimes takes place so rapidly that it is difficult to decide which was the primitive lesion. He goes even further and believes that tuberculous lesions can appear at the seats of election without the virus having left any trace at its point of introduction, that is, he admits the possibility of a "pulmonary tuberculosis of alimentary origin without any intestinal lesions." In experimental inoculations, especially in rabbits, Dr. Arloing has obtained visceral tubercle, without any trace of tubercle at the point of inoculation or in the subsequent course followed by the infecting matter. To reduce still further the dangers from bovine ruberculosis, Dr. Koch, in the insufficient number of cases of alimentary origin which he recognizes, makes a distinction between the cases due to ingestion of bovine tubercle and those due to the ingestion of bacilli of human origin. Dr. Koch indicates as a criterion that on making a pure culture of the bacilli existing in the tuberculous lesions and inoculating them under the skin of cattle "characteristic results" will be obtained, if the tuberculosis is of bovine origin "after an incubation period of about a week large tuberculous lesions will be found in the organs of all the animals injected." Dr. Arloing has injected bovine tubercle into the subcutaneous connective tissue of heifers without obtaining any visceral lesions; the effects were limited to local lesions and tuberculous nodules in the nearest lymphatic glands. Lesions of human orgin have not necessarily and always the same virulence. Dr. Arloing has shown that glandular or scrofulous lesions and many surgical tuberculous affections are less virulent than the majority of the tuberculous lesions of the viscera or the serous cavities. The latter infect the rabbit and the guinea-pig, while the former only infect the guinea-pig. Moreover, certain tuberculous lesions, which at first infect the guinea pig alone, will after several passages from one guinea pig to another, increase in virulence, and will then infect the rabbit. His pupils, Courmont and Denis, have also found attenuated bacilli from the human lung, analogous to those in tuberculous surgical affections, able to infect the guinea pig, but producing no effect on the rabbit. Dr. Koch says that human tuberculosis cannot be transmitted to cattle, with which he classes the pig, sheep, goat, and ass. Dr. Arloing has kept in his laboratory on glycerinated potatoes, a culture of very virulent tubercle bacilli of human origin, with which he has made intravenous injections in the ass and goat, subcutaneous injections in the cow and guinea pig, and intraperitoneal injections in the rabbit.

Inoculation of the Ass.—Two asses were injected on September 28th, 1896. At the

post-mortem examination lesions were discovered limited to the thoracic cavity.

In the first ass, which died in less than a month, the lungs showed here and there congestive lesions, and, in addition, throughout the lungs, but especially in the anterior lobe of the left lung, were some tubercles, giving to the finger the sensation of resistant grains.

In the second ass, killed on November 28th, the lesions were more evident to the touch than to the eye; the finger felt a large number of resistant circumscribed points. Microscopically, in the first ass were found tuberculous granulations more or less accompanied by simple inflammatory lesions classical in type. In the second ass, tuberculous granulations were easily recognized, but they were invaded by connective tissues.

A third ass received two injections at fifteen days' interval (March 27th). On May 27th the animal was killed, and showed (a) a multitude of small elevations, shining at the apex and there surrounded by a zone of congestion; (b) a large number of flat circular spots of the diameter of a pea, and of a whitish color. Microscopically the firm shining elevations were found to be tuberculous granulations, the peripheral elements, the epithelioid cells forming them, seem to be in full activity and surrounded giant cells of marked distinctness. The white spots were formed of a mass of cells in a mesh of connective tissue fibres.

In all these animals the lymphatic system was but little affected, the bronchial, osophageal, and prepectoral ganglia were not swollen; in one case only were one or two little tubercles found.

Inoculation of the Goat.—Seven goats were inoculated on April 20th, 1899. On post-mortem examination all of them showed tubercle in the lungs, especially in the anterior lobes, some of the granulations showing commencing caseation.

Inoculation of the Guinea-pig.—Four guinea pigs were inoculated with the same culture on April 21st, 1899; they died on June 16th with a generalized tuberculosis.

Inoculation of Cattle.—A dose of 1 c. cm. of the same culture was inoculated under the skin of the supranasal region in a heifer. A tuberculous nodule developed by degrees at the point of inocculation. The lymphatic glands in the maxillary region were slightly swollen. A long time after the inoculation the subcutaneous gumma softened and opened spontaneously. The disease did not spread to the viscera.

Inoculation of the Rabbit.—Injected into the peritoneal cavity an eruption of tubercles occurred on the epiploon, and on some points of the parietal and visceral peritoneum. Staining showed the presence of the bacillus of Koch.

The above inoculations in the guinea pig and heifer, as well as the intraperitoneal inoculation in the rabbit, were done with the object of testing the infective power of the culture, in case the intravenous inoculation should have given doubtful or uncertain results in the ass and goat. In the case in question they were superfluous. The above experiments are so many positive results against the negative results obtained by Dr. Koch.

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Skiagraphy in Abdominal Bullet Wounds.

A question which has much exercised the minds of many members of our profession during the last few days concerns the likelihood of benefit which might have arisen from the use of the X-rays in President McKinley's case. The operation is said to have taken an hour for its performance; a wound of the kidney was overlooked and the exact location of the bullet was not discovered. What would have happened if the Roentgen rays had been applied? There can be no question that with the most recent appliances a good stereoscopic skiagraph taken with paper geometrical arrangements would have shown the exact position of the bullet, and with a piece of led wire placed upon the wound or entrance the track taken by the bullet might have been inferred. The surgeons in attendance, of course, knew this; but, doubtless, they considered that with a wound of the abdomen in such a position as to make it certain that a hollow viscus had been wounded the delay of a few minutes for the taking of a skiagraph would have added some appreciable risk to the operation. We certainly think that immediate operation was the wisest procedure, and the post-mortem findings are evidence of this. For had the surgeons known at the operation all that the necropsy revealed, their treatment could not have been bettered. The wound in the kidney was so trival that blood in the urine was not discovered by the microscope, and the bruise of the pancreas could only have been left alone. The removal of the bullet from the back would have been unwise. The X-rays applied at once might have added an interest to the case; they could hardly have been of real value. The criticism indeed may be offered —the X-ray apparatus was under the control of a layman. That was wrong. The application of this method and the interpretation of its results should be the work of medical men. Without intelligent direction and appreciation the skiagraph is only a pitfall, and therefore a trained and ac-

curate observer should alone be held responsible.—British Medical Journal, Sept. 21, 1901.

Resection of Chest Wall for Sarcoma--Use of Fell's Apparatus for Artifical Respiration--Staphylococcus Infection treated with Anti-Streptococcus Injection--Recovery.

Keen (Therapeutic Gazette, June 15, 1901) reports the following case: A colored woman, aged twenty-five years, had a tumor on the right postero-lateral aspect of the chest, extending from the edge of the erector spinae to the outer border of the breast and from the fifth to eleventh ribs inclusive. The tumor was diagnosed as a sarcoma. Fell's apparatus for artificial respiration was used at the operation. The skin and muscles over the tumor were reflected upwards by a horse-shoe flap. The tumor was peeled off the ribs. Diseased portions of the fifth, sixth, seventh and eighth ribs were resected. The diseased pleura was removed with scissors. The collapsed lung was sutured to the edge of the openinng in the chest wall. The operation was followed by some fever which, by examination of the blood, was found to be due to *staphylococcus pyogenes albus* and the *bacillus subtilis*. Six injections of anti-streptococcus serum were given 10 c.c. in each. The patient made a good recovery. The tumor was found to be a spindle-celled sarcoma.

Suppurative Pericarditis.

Although pericarditis in children is most often a manifestation of rheumatisim there are other forms which, rare in comparison with the rheumatic affection, are probably less in childhood than they are at other times of life. (The Hospital, Sept. 14 1901.) Among them may be mentioned that form of pericarditis which is found in association with suppuration conditions elsewhere, and is due to infection of the pericardium with pyogenic micro-organisms. Dr. Still, speaking on this subject at the annual meeting of the British Medical Association, said that the term suppurative pericarditis was not altogether satisfactory, for the pericardial fluid was hardly sufficiently turbid in some cases to be called purulent. Still these cases were the result of pyogenic infection, and for an accurate conception of suppurative pericarditis it was necessary to take into consideration not only the cases of fully developed suppuration, with thick opaque pus, but also those cases in which the disease was in an early stage and the pericardial fluid was only slightly clouded. Supparative pericarditis is much more likely to occur in infants than in the later half of childhood. It is almost always part of a pneumococcal infection which has in most cases begun with pneumonia, and has affected the pleura, and it is to be noted that the presence of lymph or of turbid serum in the pleura involves a risk of suppurative pericarditis no less than does an actual empyema. Such an infection of the pericardium may occur within a few days after the onset of the pneumonia or not until several weeks have elapsed, and only the empyema or the pleurisy remains. In any case, therefore, where exploration of the chest shows turbid serum or pus, especially if on bacteriological examination the fluid is found to contain pneumococci, free drainage, by resection of a rib in most cases, should be provided with as little delay as possible; and this should be done, however small the accumulation may seem to be, for so long as such infective material remains shut up in the chest the child is in hourly risk of further infection, which, should it involve the pericardium or the meninges, is likely to prove fatal. In the diagnosis of this condition it is worth remembering that there is usually no great quantity of fluid in the pericardium. This fact, together with the absence or slightness of cardiac dilatation—so different from what occurs in rheumatism—accounts for the very slight increase of cardiac dulness which is observed in some of these cases. Again, it is to be observed that occasionally very extensive adhesions of the pericardium may form, so that an exploratory puncture in the usual position may give a negative result. For this reason exploratory incision after removal of a portion of one of the costal cartilages just to the left of the sternum seems to be a much more satisfactory method of exploration if circumstances make it possible. Lastly, as to the possibility of recovery in a child with this form of pericarditis, it is clear that with timley drainage life may be saved even though the pericardial fluid has become actually purulent. But in many cases the presence of other lesions arising from a general infection makes the prognosis very bad.

Prolapse of the Uterus.

T. Wilson, (The Hospital, Sept. 14 1901) emphasizes the fact that the so-called prolapse of the uterus is really a hernia brought about by the same exciting causes as other herniæ, and due to the yielding of a particular part of the abdominal wall, viz., the pelvic floor. With regard to treatment, after drawing attention to the great importance of preventing this complication by the correct management of

the patient during pregnancy and labour, and for two or three months afterwards, he says that when prolapse is present treatment should be undertaken at the earliest possible moment. He condemns the use of vaginal pessaries of all kinds as being liable to set up vaginitis, and exerts an injurious influence on the nutrition of the surrounding tissues. In early cases he recommends the use of glycerine tampons, which the patient is instructed how to make and introduce for herself every morning. This method, he says, besides affording the necessary support, has two conspicuous advantages over the pessary treatment; in the first place it is cleanly, and in the second it exerts on the tissues a bracing and tonic action which helps to prevent the further prolapse. When this fails he would support the pelvic floor on the outside, by a perineal pad, just as one supports any other hernia by a truss. When prolapse has become firmly established, and these methods are ineffectual, he advocates operative treatment; those operative procedures most useful being anterior colporrhaphy, perineorrhaphy, amputation of the cervix, and anterior fixation of the fundus of the uterus to the vesical peritoneum, according to the variety of prolapse present.

Lumbar Puncture as an Aid to Diagnosis in Cases of Head Injury.

Tuffier (Bull. et Mem. de la Soc. de Chir., Nov. 27, 1901) reports three cases which suggests that in cases of head injury presenting diagnostic difficulties, lumbar puncture may help to reveal not only the existence of a subarachnoid effusion of blood, and consequently the presence of a cranial fracture, but also afford some idea as to the quantity of this effusion, and probably as to the extent of the leisons to which such effusion is due, the intensity of the coloration of the collected fluid bearing a relation to the degree of the meningeal hæmorrhage. Lumbar puncture should not be practised at a very early stage, as blood staining of the cerebro-spinal fluid in the lumbar region, like subconjunctival ecchymosis, is slowly developed. The practice of lumbar puncture and of bacteriological examination of the removed fluid is likely to be of value with regard to both diagnosis and prognosis in cases of suspected infective meningitis. Lumbar puncture also it is thought, may do therapeutical service in cases of head injury by relieving pressure on the nerve centres.

Chronic rheumatism is greatly benefited by hypodermic injection of colchicin near the affected part.

Contagiousness of Pneumonia.

The history of pneumonia epidemics, (Indian Lancet, Sept. 2, 1901) in towns, barracks, households, etc., (the farthest back related by Shekins in 1348, the latest of quite recent date), has settled the question not only of the infectiousness but also of the contagiousness of pneumonia, the proof of course, being based on bacteriologic researches. Both the practicing and teaching bodies of the profession by a large majority admit to-day that pneumonia under certain circumstances becomes contagious; yet rarely, of course, as compared with the number of pneumonia cases observed. It is a fact, however, that not only is the contagiousness of pneumonia a settled principle in the practice of medicine, according to current text books, but boards of health on the Europen continent are now considering (see Bulletin of the Academy of Medicine, Paris, 1901, Prof. Graucher) the necessity of including pneumonia in the number of contagious diseases requiring official measures, just like smallpox, diphtheria, measles, scarlatina, typhoid, etc. Contagious pneumonia is communicated by the pneumococcus, from the sick to the healthy, through any avenue of entrance, and the origin of contagious pneumonia, since contagious pneumonia may be started by contact with any other pneumococci: abscess, just like erysipelas of the face, which is caused by streptococci infection (Fehleisen's long streptococcus), may be originated by contact with any other streptococcic case, such as phlegmas of the arm or puerperal septicemia.

Direct contagion (sputum alive with active pneumococci during attack, other fluids of the patient also carrying the germs, at times) may occur long after the acute attack is over, 30 days to two years, says Netter.

Indirect contagion (clothing, bedding, and other things that were in contact with the patient) may be carried by a healthy person.

Transmission of pneumonia also occurs from the mother to her child through breast nursing (Bozzolo, Aymard).

Whatever may be the mode of contagion in pneumonia, it requires the concurrence of two essential conditions, namely: increase in virulence on the part of the specific germ, decrease in resistence on the part of the economy.

Diverse and yet unknown causes increase the virulence of the pneumococcus; circumstances due to seasons, lowering of temperature of the atmosphere, alterations in atmospheric pressure and the hygrometric state of the atmosphere.

Decrease in resistance is congenital, chiefly racial (negroes); but, most often it is acquired (syphilis, grip, inhalation of metallic particles, asthma, bad hygiene). Special chemical features pertain to contagious pneumonia.

First, the duration of incubation is eminently variable, but it averages five days. From the second day the infected individual is liable to infect others, contagion during incubation having been proven as it was conclusively in the case of eruptive fevers.

After a silent incubation a single chill as in ordinary pneumonia, or in many instances a series of repeated chilly sensations, announce the outset. Constitutional symptoms are similar to those of other intoxications. Defervescence is tardy, from the fifteenth to the seventeenth day, and convalescence lingers. But the usual termination is death from the second to the twenty-third day. Complications are frequent; grey hapatization, profound alterations of the nervous system, invasion of the blood current by the pneumococcus and consequent generalized pneumococci. The prognosis is, therefore, extremely grave. Treatment is consequently prophylactic, aiming at staying the dissemination of the contagion, in view of which the professional and public minds must be impressed with the notion of contagiousness in pneumonia. Measures shall be taken to disinfect sputum by means of five per cent. solutions of formol or hot alkaline solutions rather than with bichloride solutions. Patient's mouth must be rigorously disinfected not only dur attack but after recovery, to prevent reinfection of the same individual and infection of others. Nurses and attendants must wear a gown in the sick room, wash their hands after touching a soiled article, take their meals out of the sick room and rigorously disinfect their bucco-pharyngeal cavities.

Walls of the sick room must be whitewashed, floor scrubbed with strong antiseptic solution, hangings and furniture carefully disinfected with formol or steam under pressure. If remarks are made, recall the heavy mortalliy from pneumonia and broncho pneumonia rising to thousands in Paris (Professor Graucher) yearly, and insist upon the fact that much good is derived from a little care and inconvenience.

The Therapeutics of Whooping Cough.

T. J. Mays, Philadelphia, (St. Louis Medical Review, Sept. 24, 1901), in conformity with his belief that disorder of the pneumogastric nerves is not only responsible for all the various forms of spasmodic cough, but also plays an important part in the evolution of many diseases of the lungs, has applied counter irritants over these nerves in the region of the neck in this disease with benefit. The practical way of applying the remedy is described as follows: Trace the pulsating carotid artery from behind the angle of the lower jaw to the clavicle on both sides of the neck. The pneumogastric nerves lie in close proximity and slightly behind the carotids. Gentle massage and kneading of this region of the neck, every hour or two, yield beneficial effects in many cases. The application of a strip of mustard plaster, about two inches wide, from the angle of the jaw to the clavicles on each side of the neck, two or three times a day, until the full effect of the mustard are evident, is almost sure to cause amelioration of the cough. Equal parts of gum camphor, chloral hydrate, and menthol, applied over this region, are also very useful. Painting with tincture of iodin twice a day, until irritation of the skin is produced, is also a beneficial procedure. In stubborn cases the hypodermic injection of silver nitrate over the vagi must be resorted to. Five minims of a two-and-ene-half per cent solution of cocain hydrochlorid are first injected under the skin over the vagus; the needle is allowed to remain in the puncture, and from three to six minims of a two-and-one-half per cent solution of silver nitrate are injected through it. Under such treatment the severity of the cough diminishes, assumes a different character, and often in the space of one or two days.

A Perfect Throat.

It has been well said that there is no such thing as a perfect throat.

The imperfection has to do with both the respiratory and alimentary tracts. We "breathe things" as well as air, and it is the faculty of the intrusion to predicate and originate the most formidable diseases of the two systems.

To remedy this imperfection is a matter that is of the utmost moment, as all æsophageal and bronchial disorders are precursory to grave maladies. Naturally, of course, they have different dependencies, but to counteract the main cause, i. e., nasal, pharyngeal and laryngeal inflammations, the profession has done itself much credit in using Sander's Eucalyptol. This is a remedy which excels in clearing the vocal cords, strengthening the voice, invigorating the nerves, and thus acting prophylactic of those pulmonary and gastric troubles that embarrass the practitioner. The catarrhal, irritant, and inflammatory derangements disappear, and "hard colds," "nervousness," "dyspepsia," and the allied

disorders that point out the condition of *throat debility*, are simultaneously improved. There is no opposing testimony. The evidence in favor of the remedy is remarkably refreshing. It should be used with equal parts of spirits of chloroform, 20 drops to a pint of hot water for an inhalation.

Mirror Writing.

The so-called mirror writing is the normal spontaneous effort to write with the left hand of a person accustomed to write with the right hand. This tendency applies equally to all movements acquired by the right hand. Without any special education the left hand reflects as in a mirror the gesture of its right fellow, so that we are driven to the conclusion that there has been a process of unconscious education of the left extremity *pari passu* with that of right member, in other words that the training of the centre for the right hand has been reflected *en miroir* on the cortical centre for the other limb. It has been suggested that this fact should be turned to account in the case of persons who are deprived of the use of the right hand by encouraging them to adopt the plan of mirror writing with the left hand in preference to the tedious acquisition of the ability to stimulate right-handed writing. It is asserted, moreover, that this training has for effect to favour the functional reintegration of the damaged centre on the other side. It is interesting to note that the readiness with which persons write *en miroir* with the left hand is in direct proportion to the extent to which they have trained the right hand. Persons of defective education, in whom the tracing of each letter entails a distinct effort of the will, are incapable of writing with the left hand, even *eu miroir*, whereas those accustomed to write with fluency adopt this alternative with comparative ease.—*Medical Press and Circular.*

Koch's New Theory Is Vigorously Disputed.

Prof. Koch's theory that human beings are immune from contagion from tuberculous cattle was vigorously disputed in the British Congress on Tuberculosis (Public Health Journal Sept. 1901).

Earl Spencer, a Vice-President, hoped it was true, but hoped more that the dissemination of such views would not cause laxity on the part of dairymen and cattle-owners, or less vigilance by the authorities charged with protecting the consumers of milk. He earnestly trusted that the congress would not indorse the view that it is unnecessary to take measures to prevent the transmission of tuberculosis from animals to humans.

Prof. John MacFadyean, of the Royal Veterinary College, said that until Dr. Koch had declared himself it was supposed to have been fully proved that hunam and bovine tuberculosis were identical diseases.

He contended that the grounds upon which Dr. Koch based his belief are either not well founded or have little bearing upon the question. He submitted arguments to show that there are the strongest reasons to regard milk from tuberculous cows as distinctly dangerous to human beings.

Dr. Ravenel of Philadelphia, gave an instance of the infection of ten persons from tuberculous cattle, though he considered such instances rare.

James King, a veterinary inspector of London, dissented flatly from Dr. Koch's belief, and urged stringent measures to insure the healthfulness of imported carcases and stamp out tuberculosis from British herds, where it is alarmingly prevalent.

Virchow says Prof. Koch's statement before the congress in London of his discovery regarding tuberculosis has been received by physicians here with scepticism. Before the regular proceedings of the Berlin Medical Society today the members discussed Prof. Koch's address informally, dwelling upon the fact that his present conclusion is diametrically opposite to his former position. Several members pointed out that his old theory was asserted by him with as much decisiveness as the new one.

Prof. Virchow said;

"Nothing remains for me but to maintain more positively than ever my view that the decisive thing in tuberculosis is the tuberculous centre (tuberkelknoetchen), the pathological mark of tuberculosis, and not the bacillus as such.

Mental Scientists Under Arrest.

Helen Post, her husband, Colonel C. C. Post, and her son-in-law, C. F. Burgman, were arrested at Daytona, Fla., on August 24th, charged with using the mails for fraudulent purposes. The three were taken to Jacksonville for a preliminary hearing before United States Commissioner William Archibald. The offense alleged consisted in sending through the mails circulars professing to cure patients at a distance by means of mental science. Mrs. Post claimed the power to heal all kinds of diseases, even to restore the blind to sight, holding that no disease was incurable by her method of treatment.

The French and English Birth Rates.

In an editorial in the British Medical Journal we find the following:

In a well-reasoned letter to the Times, Dean Fremantle draws attention to the serious decline in the English birth-rate, on which comment has been frequently made in our columns. In the year 1875 the birth-rate in the United Kingdom was 35 per 1,000 of the population, in 1900 it was only 29. This means for our population of 41½ millions a defficiency of 249,000 children for each year, and implies, as pointed out by Dean Fremantle, a much more rapid decline of the birth-rate than in France, in which the process has been a slower one and longer established than in this country.

In an article in the British Medical Journal of June 22nd (page 1564) the net result on natural increase produced by the lowered birth-rate and death-rate was shown; and it was made clear that the lowering of the death-rate is not keeping pace with that of the birth rate, and that in the future, as the average of the population increases *pari passu* with lowering of the birth rate, the balance of increase of population is likely to become less. The lowering of the birth rate and the resulting lowered rate of natural increase of the population have been concealed by the greater amount of immigration in recent years and by the lowered death rate by means of which we have saved about have the loss due to the lowered death rate.

The general cause of the serious decline in the birth rate is not difficult to discover. It is correctly attributed in the letter already mentioned "to the wish for ease and material enjoyment." That it is some general cause and not circumstances impeding the subdivision of properties to which it has been attributed in France, is shown by the international character of the reduction of the birth rate. Some further light is thrown on the means by which large families are prevented, by the fact that the reduction in the birth rate has been much greater in Protestant than in Roman Catholic countries. France appears to be an exception to the first rule; but that country is largely materialistic, and it is doubtful if Roman Catholic teaching on this subject dominates the population. The reason why the Roman Catholic population shows a much smaller decline of the birth rate than the Protestant population is that among the former the production of abortion and the prevention of conception are alike regarded as deadly sins, the continuance of which prevents absolution from being obtained. That there is no essential physical reason for the decline in the birth rate in France is shown by the enormous birth rate of the France Canadians, who remain orthodox as well as prolific.

The fact cannot be disguised that the chief means by which the great lowering of the birth rate in most civilized countries has been brought about has been by the dissemination of instruction as to the means of artificially preventing conception. The medical profession as a whole has set its face against such practices, which are unnatural and degrading in their mental effect, and oft times injurious to both husband and wife in their physical results. A small number of medical men have held and taught other views, but the evil has been chiefly caused by cheap pamphlets on the subject, and by advertisements in weekly and other newspapers (often so-called religious newspapers) which under a very thin disguise offer facilities for procuring abortion or preventing conception. Dean Fremantle's letter gives us some hope that the voice of the clergy may be heard more clearly in protest against such practices and that the public conscience may be roused to secure an abatement of what is a great national danger.

The prevention of conception is doubtless the cause of the lowered birth rate. More attention needs, however, to be given to the production of abortion, which it is to be feared, is more prevalent than is commonly imagined. The recent discovery of a large number of unburied babies' corpses in an undertaker's establishment in Birmingham illustrates furthermore the evils lurking behind our national culpability in neglecting to insist on the registration of still-births. We have in such facts as these opportunities for the prevention of live-birth which ought not to be possible; and although these are only a small portion of the cause of the decline in our national birth rate they urgently require reform.—The Indian Lancet, Sept. 9, 1901.

On the Diagnosis of Tuberculous Peritonitis in Children with a Report of 54 Cases.

Dr. A. A. Kissjel, in the conclusion of an article (Vratch, May 26, O. S., 1901), states that all the cases of so-called idiopathic peritoneal effusion were taken in the author's hospital to be cases of tuberculous peritonitis, and accordingly laparatomy was performed in all instances. Cirrhosis of the liver in children is sometimes mistaken for tuberculosis peritonitis, for the ascites may be the only symptom. It must be borne in mind that tuberculous peritonitis has been found in cases of cardio-cirrhotic ascites in children. The exudate in tuber-

culous peritonitis is not infrequently absorbed spontaneously under stimulating treatment, and the children recover. In most cases the onset is insidious, at first with emaciation and pallor which cannot be accounted for. The presence of a serous pleuritic exudate facilitates the diagnosis. The most valuable symptom is the thickening of the peritoneum, which can be felt by grasping the abdominal wall in the shape of a fold. The fluid in tuberculous peritonitis is rich in albumin and of high specific gravity. Often the whole peritoneum is found covered by dense tuberculous masses, although the patient's condition had been fairly satisfactory. The most difficult cases are the rare instances in which there is tuberculous pericarditis in addition to a serous peritonitis. In rare cases the disease begins with acute symptoms.—N. Y. Medical Journal.

Postural Treatment of Phthisis.

Schenk (Wien. med. Woch., July 6th and 13th, 1901) has applied the principle of passive hyperæmia, introduced by Bier for arthritis and tuberculous joint disease (Epitome, Vol. i, 1900, par. 181) to pulmonary tuberculosis, and considers it specially suitable owing to the antagonism which is said to exist between phthisis and those heart lesions which are accompanied by pulmonary congestion, such as mitral stenosis. According to Benecke, congenital predisposition to phthisis depends on a disproportion between the size of the lungs and the heart, the former being abnormally large and the latter abnormally small, so that a permanently deficient pulmonary circulation results. Acquired predisposition consists essentially in the malnutrition which is the cause or result of anaemia, and which affects the nutrition of the lungs among other organs. In order to increase the supply of blood to the apices, the foot of the couch or bed is raised on blocks, so that the patient lies on an inclined plane with head at the lower end. The more obliquely the patient lies, the more rapid is the improvement. The cerebral hyperaemia produced is grateful to anaemic subjects, but if it causes headache an icebag or Leiter's tubes may be applied to the head. The hyperaemia produced mechanically in the apices of the lungs renders them an unfavorable medium for the development of the tubercle bacillus. The principle involved in the writer's treatment is not new, and was advocated by Schian in 1899 (Deut. militarærzt. Zeit., February). In dry weather the patients lie in this position the whole day out of doors, in rainy or misty weather in the dry air of a heated room. Damp air is injurious in phthisis, as it diminishes inspiratory exosmosis. During the night the foot of the bed is raised on blocks. In order to further increase the pulmonary hyperaemia, for some hours every morning and afternoon a moist bandage is applied to the chest; over this is drawn a kind of vest made of indiarubber tubing, through which water at 113 deg. F. or more is made to circulate, as in Leiter's tubes, and a dry flannel bandage is applied over all. The rest of the body is lightly clothed—in summer with a single sheet—so that the determination of blood to the chest is aided by the contraction of the cutaneous arterioles in other parts. For the same reason the feet, hands, and abdomen are rapidly moistened every five minutes with a sponge wrung out in cold water. The patients are allowed off the couch or bed only for their meals. The proof that the hyperaemia produced by the application of warmth affects the lungs as well as the skin is that, after the treatment has been applied for a few days, a systolic murmur appears at the apex, with accentuation of the pulmonary second sound. The heart can be made to meet the extra work thrown upon it, and the murmur disappears if a separate coil of tubing through which cold water circulates is placed over the cardiac region. During sleep the oblique position of the patient allows the secretion in the smaller bronchi to gravitate to the larger, with the result that on waking the sputum is very copious, but is lessened during the day. Cough, therefore, is greatly lessened, partly through the sedative action of warmth. The pulmonary hyperaemia produced does not increase the danger of haemoptysis.—British Med. Jour. Sept. 28, 1901.

Whooping-Cough.

Every phase of medical thought seems to bring its impress on the pathology and aetiology of whooping-cough. The story of changing views is seen in the multitude of remedies that as a cloud of witnesses tell how unsuccessful our search for the source of the disease has been. Still the search continues, and MM. Jochmann and Krause (*Zeitisch. fur Hyg.*) consider that from an examination of the expectoration of eighteen patients suffering from the disease they have found a specific bacillus. They describe the bacillus as very small, remarkably thick in proportion to its length, discoloured by Gram's fluid. It was discovered some time ago by Eppendorf and physically its appearance resembles that described by Czaplewski; but it is more readily cultivated. Besides its morphological characters, it is known by its regaining colour

after being decolourised by the Gram fluid. If this latest of theories is accepted we may expect to find the disused vapourisers and inhalers once more called into activity, and the old time remedies of cresote, phenol, coal-tar, and so forth again actively employed. The bacterial theory is, however, quite as good as any other, and we make no objection, though we cannot see how it explains the onset of a paroxysm of coughing on the swallowing of some solid food—aphenomenon so familar to the long-suffering hardworked gen ral practitioner. *Medical Press & Circular.*

Empyema.

Hartwell (Medical News) describes 52 cases as follows:

1. Children are especially liable to empyema following pneumonia. Unless promptly relieved by drainage of pleura the prognosis is bad. With such relief the prognosis is good. 2. Pneumonia caused empyema in 50 per cent. of the cases here considered, and such cases were of severe type. 3. Tuberculous family history exerts little influence on empyema. 4. In about one-sixth of the cases the empyema was sacculated. 5. The pneumococcus was found in 50 per cent. of the cases where examination was made; the streptococcus in 33⅓ per cent.; the staphylococcus in 8 per cent.; the tubercle bacillus in 4 per cent., and no bacterium in 16 per cent. The pneumococcus produced the most virulent infection. 6. Chloroform was the anesthetic of preference. Deep narcosis is contraindicated, owing to the danger of pus being drawn into the other lung from a ruptured bronchus. 7. In adults with general empyema two inches of the seventh and eighth or eighth and ninth ribs in the posterior axillary line should be resected. In children the same length of the seventh rib. Simple incision, with our present knowledge, is rarely advisable. 8. Operation is indicated as soon as diagnosis is made. 9. Irrigation of the abcess cavity with bichlorid solution, 1-5000. or carbolic acid, 1-100, is indicated, unless drainage is perfect and no sepsis is present. In children the solutions may be weaker. 10. The mortality from the empyema proper was 12 per cent. We may hope to reduce it to one-half that number by earlier and more radical treatment.

Treatment of Sarcoma by the Roentgen Rays.

Carl Beck (Munch. med. Woch., August 6th, 1901), of New York has treated a case of recurrent sarcoma by the Roentgen rays with apparent success. A man, aged 36, had had a black spot, possibly a mole, over the left external malleolus for fifteen years. This began to enlarge rapidly in November, 1900, and by Christmas was the size of an apple, ulcerated, and adherent to the underlying tissues. There was an enlarged inqninal gland. Amputation was refused, and the operation was limited to removing the tumour with the underlying periosteum and the gland in the groin. It was a melano-carcoma. Six weeks later the tumour had recurred, and though flatter had a greater circumference than before its removal. There were also multiple bluish-black nodules, the size of a pea round about it. There was a mass of inguinal glands the size of a goose's egg. These, with the tumour, were again extirpated. Four weeks later the recurrent tumour was surrounded by at least thirty smaller nodules the size of grapes, which bled readily when touched. There were also numerous nodules over the inner side of the calf, and the inguinal glands were again enlarged. A third extirpation of the tumours, which were of alveolar structure, with pigment in the cell nests and in the cells of the interstitial connective tissue, was performed. The Roentgen rays were applied to the wounds over the ankle left after the third operation, at first for ten minutes, then for twenty, thirty, and at last forty-five minutes. After seven applications at intervals of from two to three days, the whole course lasting six weeks, there was no sign of recurrence and some of the nodules over the call (which apparently had not been removed at the operation) had completely disappeared, while others were diminishing. During this treatment the inguinal glands again in enlarged. They were removed, the rays were applied to the wound, and three weeks later there had been no recurrence. Thus, nine weeks after the removal of the tumour over the ankle there had been no recurrence though before the rays were applied the growth rapidly reappeared after removal. The fact, also, that typical sarcomatous nodules over the calf disappeared entirely under the rays without surgical interference proves their efficacy. The writer has seen also an epithelioma disappear entirely under the application of the rays. He suggests that they should be applied in every case of malignant tumour in which it is doubtful at the operation whether the whole of the disease has been removed in order to guard against recurrence.

Five millions of people are reported to have died in India within the last five years from famine and conditions induced thereby.

Wounds of the Venous Sinuses of the Brain.

Wharton (Ann. of Surg., July, 1901) gives the results of a study of 70 cases of wounds of the great venous sinuses of the brain, collected from various sources. Of these cases, five came under this surgeon's personal observation, and he was thus led to investigate this class of injuries with special reference to their frequency and mortality, and to the method of treatment which had been employed with the most satisfactory results. The results of his study are summed up in the following conclusions: (1) Wounds of the venous sinues of the brain should be classed as dangerous injuries, being followed by high mortallity from external or intracranial hæmorrhage or septic infection; (2) they are specially liable to infection, resulting from septic thrombus and pyæmia, therefore the greatest care should be taken to render them aseptic and to maintain them in that condition; (3) the most satisfactory and generally available method of treatment consists in controlling the bleeding by aseptic gauze packing; (4) ligation of the venous sinuses presents definite dangers in itself, is only available in certain wounds where a free exposure of the injured sinus is possble, and cannot be employed with advantage in ordinary accidental wounds of the sinuses; (5) the application of a lateral ligature to a wound of a sinus is less difficult and dangerous than ligation of the sinus, but is appliacable only to small wounds; (6) suture of sinus wounds is a valuable procdure in a certain class of cases, namely, small wounds which can be freely exposed; (7) forceps pressure is also a ready method of controlling hæmorrhage from wounds of the sinuses, but possesses no distinct advantage over some of the other methods, and its employment is not free from danger.

Nasal Tuberculosis.

This condition was first noticed by Morgagni, but the first primary cases were published by Riedel. Renshaw, (Journal. Pathology and Bacteriology) having regard to the fact that 116 cases have now been published, expresses the opinion that the condition is not so rare as is generally supposed, and that, if looked for, many obscure nasal affections would prove to be of this nature. Cases of strumous glands, in which no primary cause is to be found, may also in some cases be due to primary invasion of the nose. In a series of experiments on guinea-pigs, he was able to show that the nasal mucous membrane may be infected by simply introducing sputum, while leaving the membrane intact. Of the eight animals used, all showed signs of local irritation, and in seven definite tuberculous lesions were produced. With regard to the extension from this primary focus, infection of the meninges did not occur, even in extensive ulceration of the superior fossa, nor was direct infection by way of the respiratory passages found; the track of invasion was in every case by the lymphatics to the glands, and from these to the viscera. The further the lesion is from the entrance to the nostril, the more rapid it seems is the course of the disease, and the earlier the invasion of other organs.—*Baitish Medical Journaal,*

Brand Treatment of Typhoid.

From an analysis of 1,904 cases, Wilson and Sallinger find that the treatment by cold baths does not avert nor diminish the frequency of haemorrhage, but does that of perforation. It diminishes the danger of complication especially in the respiratory and circulatory tracts, and it is apparently attended by a somewhat increased frequency of relapse, but the statistics are rather unsatisfactory in this regard, and it is also attended by albuminuria in a large percentage of cases. It has no influence on increasing the danger of otitis media. The modifications of the method originally formulated, adopted as a result of experience, are: (1) Administration of purgatives—calomel—early in the attack (2) External applications, cold compresses, and occasionally turpentine stupes. (3) Medication in special cases. (4) The temperature at which the bath is administered. Whenever the temperature reaches 101-4, three hours after the bath, it is repeated. (5) Continuation of the bath during convalescence giving one or two plunges a day during defervescence, and a plunge every one or two days for a short time after. The tub need not be kept close to the bed, and the milder cases help themselves in and out. (7) The sooner the treatment is begun, the better.—*Indian Medical Record.*

Conservative Treatment of Joint Tuberculosis.

Among his interesting surgical cases, Eisendrath reports his experience with the treatment of joint tuberculosis and cold abscesses by the injection of 10 per cent. solution of iodoform in glycerine, a method first suggested by Mikuliz, of Breslau. He briefly reports two cases which are still under treatment, and not having extensive statistics of his own, he quotes from those of Henle, published last year in Brun's Beitrage. The method was combined with the venous congestion method of Bier, which consists in applying constriction

above a joint to retard the flow of venous blood, but not interfere with the arterial circulation. Henle's tables include 133 cases treated by both methods, in which results were obtained in 95 observed three years after discharge. In 75.8 per cent. the results were good. Of a total of 235 cases treated altogether, 167 were observed three years after discharge, with good results in 70 per cent. The method consists in the injection, at regular intervals, of a 10 per cent. solution of iodoform in glycerine into the tuberculous joint or abscess. The quantity injected varies from 4 c.c. in children to 30 c.c. in adults, and larger doses in cold abscesses. If in the upper extremities, the patients are allowed to go about at once; if in the lower, they are kept quiet for three or four days. No especially bad effects are observed. The injection is so applied as to affect every part of the joint, and the intervals between injections varies from eight days to four weeks. General treatment must not be neglected in the way of good nutritious food, milk, outdoor life, iron and creosote. Mikulicz only makes it a rule to resect in cases of the knee-joint in adults. In other cases it is necessary only in a very small proportion.—Indian Record, Sept. 11, 1901.

Purulent Cerebro-Spinal Meningitis due to Influenza.

Lauger (Jahr. fur Kinderheil., January, 1901) narrates a case in which he discovered influenza bacilli in the cerebro-spinal fluid removed by the lumbar puncture, and recovery from meningitis began immediately after this was performed. Pfeiffer, the discoverer of the influenza bacillus, at first declared that it could only be found in the respiratory tract, but further researches proved its presence in the brain, cord, and meninges post-mortem. A published case of Slawyk's is the only other instance of influenza bacilli being detected, during life, in the central nervous system. Lauger's case is one of a boy 9 years old, who was attacked, together with the whole family of eight, with coryza, fever, and headache. A week later he became listless and drowsy and complained of severe headache. During sleep he was restless. Vomiting began a few days after and muscular rigidity towards the end of the first fortnight. On admission there was rigid retraction of the head, great tenderness in the head and neck, general muscular rigidity, with flexion at the knees and elbows and retraction of the abdomen and hyperaesthesia, so that he desired not to be touched or moved. From time to time, though undisturbed, he had stabbing pains in the neck and occpital region. Pupils reacted sluggishly; knee-jerks and ankle-clonus not elicited. Pulse slow, 72; temperature, 99 deg. He lay in a partial stupor and frequently sighed deeply, but would look up when addressed and reply to questions. The diagnosis—acute intracranial disease, probably tuberculous meningitis—was recorded. Under observation, the pulse rose to 132 and the temperature to 104 deg. on the third day, and Quincke's lumbar puncture was performed.

Following the strictest aseptic technique, the needle was inserted in the middle line between the third and fourth lumbar vertebræ. Two and a half drachms of purulent fluid came away pretty quickly in drops through the needle. When centrifuged this yielded a quarter its volume of tenacious yellow deposit, composed of fibrin and abundant pus cells. A few of the latter contained short bacilli. The only medium which would produce colonies was blood-smeared agar. The bacilli in these were short and slender, non-motile, staining readily with most dyes, but decolorised by Gram's. In short, they were influenza bacilli. Cultivations from the boy's nasal secretion produced only staphylococci and other small cocci. Interesting as these results were from the diagnostic standpoint, the therapuetic effects of the puncture appeared to be even more striking, for it was followed by a critical fall of temperature to the normal, and the temperature never rose again. The next morning he was so much better that he sat up in bed and ate his breakfast eagerly. The neck was rigid and tender, but the spontaneous shooting-pains were gone. Skin was hyperaæthetic and pulse rapid, 120. In the two subsequent days the rigidity of the neck and limbs was greatly reduced, and he could change his position, read, and play without discomfort. By the end of a week the symptoms of spinal inflammation had so far abated that he made an attempt to walk. Eighteen days from the date of puncture all objective signs had cleared up, including optic neuritis, which was at its height during the febrile period.

The knee-jerks, however, did not return. The recovery of a case of attested influenzal meningitis is evidently of great importance. From the stand-point of pathology it strengthens Lepuie's assertion that influenzal meningitis is not necessarily a fatal complication, and that symptoms, such as headache, stupor, rigidity and retraction of the neck, slow pulse, etc.. which occur in influenzal cases, and often disappear gradually or suddenly with recovery of the patient, are really signs of a true meningitis. Other writers have given such

symptoms the name of "influenzal psuedo-meningitis," considering them due to influenzal toxins, but not to inflammation by the bacillus, because the cases recovered. This case, however, shows that bacilli may be present in the cerebro-spinal fluid without a fatal issue. Lumbar puncture must be made use of more frequently to decide whether or no pseudo-meningitis is to be considered a correct term. Still more important in this operation from the therapeutic standpoint. Sauger was so much impressed by the crisis immediately following the puncture in this case that, while admitting that such a crisis is not known to occur spontaneously in influenza, and may have been merely an accidental coincidence with the lumbar puncture, he intends always to resort to that as a therapeutic measure henceforth in similar cases.—*British Medical Journal.*

Cleansing of Children's Mouths.

The mouth of the child, like the mouth of the adult, is an excellent breeding ground for microbes, several known varieties of which are our ordinary hosts, but some which are pathogenic. We find in the mouth the microbes of suppuration, those which occasionally produce diseases of the mouth, those which cause dental caries, to say nothing of Lœffler's bacillus (diphtheria), Koch's bacillus (tubercle), etc., etc.

During the coure of febrile diseases, the antisepsis of the mouth should receive special care in order to protect the child from secondary affections, which, as we know, lead to rapidly fatal complications.

Thus in enteric fever, for example, in the severe fevers which cause dryness of the mouth, the suppuration of the parotid which supervenes and carries off the patient is an infection caused by microbes invading Stenou's duct.

In health it is not less necessary to preserve the cleanliness of the mouth in order to prevent disease; thus dental caries, which is common in children and find a predisposing cause in the excess of surgery food they consume, is due. not to one microbe, but to several which are found in the mouths of every one. Adults, partly for the sake of personal appearance, partly for cleanliness, brush their teeth; and the brush charged with some dentifrice accomplishes its sanitary mission by a cleansing still too infrequent and often too summary. But what is done for young children? Too often nothing at all.

The mouths of the youngest children should be carefully cleansed, and they should be taught to do it themselves when old enough; this will be of the greatest benefit to them. Water. boiled water, free from germs, is within the reach of all; employed morning and evening and after each meal produces a relative cleanliness, but this is not sufficient.

If we desire antisepsis, we must employ some substance which in the first place is innocuous, something that is antiseptic and at the same time does not affect injuriously the teeth or the buccal mucous membrane. There are a variety of substances which fulfil these conditions.—*Indian Medical Record*, Sept., 11, 1901.

Santonin (Santonic Acid) in Tabetic Pains.

Negro (Giornale della reale Accademia di medicina di Torino) has tried santonin with success in the treatment of the lightening paing of tabes. Of the eleven cases in which the drug was tried, eight were decidedly relieved, two temporarily relieved, and one unaffected. At first the author gave 15 grains in three doses, at intervals of three hours, and in subsequent attacks began with 10 grains, 5 grains five hours later. The pain became decidedly less in three hours after the first dose, and completely ceased two hours after the second dose. So far the author has only administered it during the crisis, not in the intervals. None of the patients has this treatment more than four or five times in the course of two or three months.—*Indian Medical Record*, Sept., 11, 1901.

Blue Milk Secreted for a Month From the Breast of a Woman Who Never Bore Children.

La Grece Medica'e says:—The subject was a woman of 35, married eight years, who menstruated normally, but had never been pregnant. The patient otherwise healthy, suffered from complete prolapsus uteri, the result of lifting a heavy body four years previously. For one month a blue secretion presented at both breasts without the patient taking any medicine which could account for such a condition.

The origin of this bluish tinge must have come from a non-pathogenic bacillus having the property of giving this color to milk. The milk of certain animals may thus be changed from their natural color to that of blue or red, because of the presence of non-apthogenic bacilli—bacillus cyanogenus and micrococcus prodigiosus.

Maiwatchin, on the borders of Russia, is the only city in the world peopled by men only. The Chinese women are not only forbidden to live in the territory, but even to pass the great wall of Kalkan and enter into Mongolia. All the Chinese of this border city are exclusively traders.

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A Case of Erythroderma Squamosum.

Ravogli (Journal of the American Medical Association). The patient was a boy three years old, of healthy stock and habit. The peculiar affection of skin from which he suffered had apparently attacked each of the other seven children in the family at some time in their lives, although at a later age and in a milder form. The entire integument, save that of the palms and soles, was red and scaly. There were no other lesions and no subjective sensations. The scales varied much in amount and character in different localities. The nails were normal. The general condition was not in the least affected as a result or accompaniment of the eruption, the urine and blood examinations being negative.

The dermatosis has already relapsed twice. Cod-liver oil inunctions were sufficient to remove completely the various scales. Microscopical examination of the skin revealed a certain amount of cellular infiltration about the blood vessels in the papillæ and subpapillary layer, the vessels themselves being markedly enlarged. These anatomical alterations constitute the essential feature of the disease, and bring about a hardening and exfoliation of the horny layer. Only two precisely similar cases are upon record, and both occurred in adults. There are, however, other affections characterized by redness with desquamation, such as pityriasis rubra and scarlatiniform erythema.

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Professor Koch's Theory.

The *Munchener Neuste Nachrichten* publishes a long interview with Professor Edin Klebs, one of the leading German authorities on tuberculosis. Professor Klebs sharply criticised the theory that human and bovine tuberculosis are essentially different. He cited several cases, which, in his opinion, conclusively proved that both adults and children were subject to infection from the milk of cows suffering from tuberculosis. The only one of his six sons who had been fed on cows' milk had died of tuberculosis in his second year. None of the others who had received their first nutriment from wet nurses, had suffered from the disease. He did not regard Professor Koch's results as conclusive and declared that the assertions made by that scientist had not been proved. The German Government has appointed a committee of which Professor Virchow is a member to investigate the question.—*The Indian Lancet.*

Members of the Homeopathic Medical Fraternity in Pennsylvania are making a strong plea for an insane asylum to be under the control of members of their school, as there is not an asylum in the State where a homeopathic doctor is admitted to practice. They ask for $200,000 with which to erect a building, and have a good prospect of getting it.

Tuberculous Peritonitis.

Wallis, according to the Hospital, classifies the various theories as to the reason of the beneficial effect of laparotomy in this disease as follows:

1. The removal of the ascitic fluid causes an alteration in the abdominal pressure, and an increased blood supply.
2. Exposure to air.
3. Action of light.
4. Introduction of toxalbumin, which is fatal to the tubercle bacillus.
5. Traumatism of operation causes fibrinous peritonitis, and the bacilli become encapsulated.
6. It is due to the advent of leucocytes and the resulting phagocytosis.
7. The opening of the abdomen causes a physiological change, which in some way is detrimental to further growth of the bacilli.

In many cases of tuberculous peritonitis where the mesentery is involved, intestinal occlusion occurs, with or without the presence of a tumor. According to the case the treatment then consists in (1) the formation of a fæcal fistula; (2) resection of the bowel; or (3) lateral anastomosis or short circuit. Four varieties of abdominal tumors which are caused by tuberculous inflammation have been described:

1. Nodular tumors of the mesentery.
2. Tumors of the omentum.
3. Thickened, contracted, and adherent coils of intestine.
4. Encysted exudation forming a tumor, with walls composed of adherent intestines, and other abdominal or pelvic viscera which happen to be adjacent to the focus of inflammation.

The third variety is the one which is apt to be most misleading, both before and after the abdomen is opened.

The season will soon be here for the usual epidemic of coughs and colds with thousands of cases slow to respond to ordinary treatment. The value of petroleum at the very beginning of throat and lung troubles is acknowledged by leading physicians of this country and England, the results being quick and decisive.

The use of opiates or other narcotics that soothe and quiet temporarily is to be avoided. They disturb digestion and cause constipation, frequently doing more harm than good.

Angier's Petroleum Emulsion with Hypophosphosites soothes and heals the inflamed mucous membrane, and is the first thought of physicians who have used it in the treatment of coughs and bronchial troubles generally. Unlike cod-liver oil it does not upset the stomach or disturb digestion, but puts the organs in a condition to assimilate and digest nutritious food and it may be prescribed with confidence in all diseases where Cod liver oil has been heretofore indicated.

Huxley on Pyhsiology.

In the recently published Life and Letters of Huxley, the subject of the biography in one of his letters says: "I would urge that a thorough study of Human Physiology is in itself an education broader and more comprehensive than much that passes under that name. There is no side of the intellect which it does not call into play, no region of human knowledge into which either its roots or its branches do not extend; like the Atlantic between the Old and the New Worlds, its waves wash the shores of the two worlds of matter and of mind; its tributary streams flow from both; through its waters, as yet unfurrowed by the keel of any Columbus, lies the road, if such there be, from the one to the other; far away from that Northwest Passage of mere speculation, in which so many brave souls have been hopelessly frozen up."—*The Dietetic and Hygienic Gazette.*

Direct Infection with Phthisis.

Direct infection of a nurse from a consumptive patient is reported by Stewart (Amer. Jour. of the Med. Sci., September, 1901) in the description of a case of acute splenic miliary tuberculosis. The patient was a young woman who had had no evidence of tuberculous infection prior to her attendance upon a phthisical patient. The patient was in poor circumstances, and had apartments which were badly heated and damp, and the nurse nourishment while attending him was of very poor quality. In the middle of her second week of attendance upon the case she became acutely ill and died sixty-eight days later, the necropsy revealing a universal tuberculous infection.

The University College of Medicine of Richmond, Va., whose advertisement appeared in this Journal during the summer, reports an encouraging outlook for the session of 1901–2, the number of new students enrolled to this date being in advance of the total number of new students for the session of 1900–1901, and a good prospect of more within the next ten days.

October 5, 1901.

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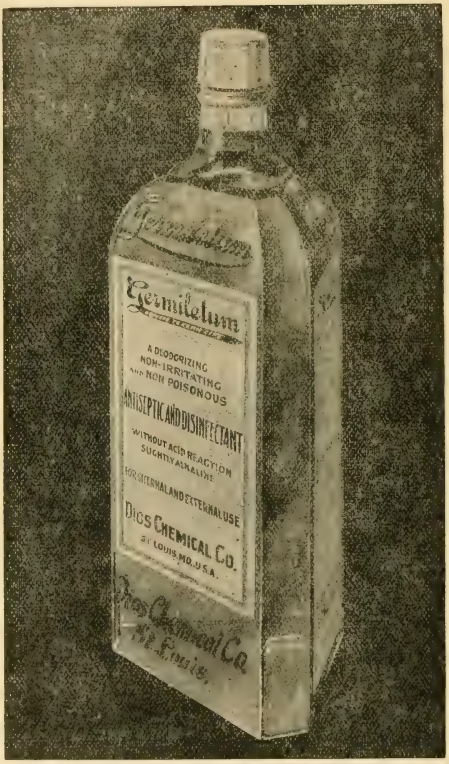

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To control the temperature, keep the bowels in an aseptic condition, and to prevent diarrhœa and hemorrhage:

℞ Salo-sedatus 20 grains.
Sulphocarbolate of Zinc 10 grains.

M. Sig.—Divided into ten powders, and give one every two, four or six hours, as may be required to moderate the febrile movement.

Should diarrhœa and hemorrhage actually come on, then:

℞ Salo-sedatus 20 grains.
Sulphocarbolate of Zinc 30 grains.
Subnitrate of Bismuth. 2 drachms.

M. Sig.—Divide into ten powders, and give one every two, four or six hours, as may be required to repress diarrhœa and arrest the hemorrhage

A solution of sulphite of soda, one drahm; to water, four ounces; one teaspoonful every four hours while the patient is awake, is a valuable adjunct.

Salo-sedatus and sulphocarbolate of zinc are furnished in tablet form, put up separately, and these drugs may be given in tablet form if preferable.

When we come to study the conditions in typhoid fever, we can readily understand why the above treatment should be successful. We have a general ferbile movement, and an inflammation of mucous membrane in the small intestines, with a tendency to ulceration, hæmorrhage and septic conditions, Now, there is no combination in existence that will more certainly moderate the febrile movement, when the above conditions obtain, than salo-sedatus and sulphocarbolate of zinc. One of the principal ingredients of salo-sedatus is salol; every physician knows that this comes from a combination of carbolic and salicylic acid, two of the most powerful antiseptics we have. And in this combination of salo-sedatus, the chemical ingredients are held in an insoluble condition till they reach the small intestines; then the salol is broken up and expends all of the antiseptic powers belonging to carbolic and salicylic acid, and the parts are protected from any harsh action that might come of either of these acids given alone or in combination, by other ingredients of salo-sedatus, and the results are most salutary, even marvelous. The sulphocarbolate of zinc is also a powerful antiseptic and astringent as well, and when combined with salo-sedatus, or given alternately with it, it is well tolerated by the stomach will many times prevent hæmorrhage and where hæmorrhage actually occurs it is the best remedy at hand to control or arrest it.

Any physician who will carefully study the conditions of typhoid fever and then make himself familiar with the action of the drugs above mentioned, can handle typhoid fever with a degree of success that will astonish him. While we do not pretend that this treatment aborts the disease, we do contend that we can control it, prevent alarming conditions, conserve the vital forces, and safely conduct our cases through the course of the disease, and have them convalescent at the proper time, and seldom have a protracted case or lose a patient.

*By Geo. C. Pritzer, M.D., St. Louis, Professor of the Principles and Practice of Medicine in the American Medical College of St. Louis.

Success of Serumtherapy in Diphtheria

Jelnick (*Bulletin General de Tharapeutique*, March 15, 1901) has gathered statistics from all the hospitals of the world, as well as from the practice of physicians, on the success of serumtherapy in the treatment of diphtheria. The statistics show that in Austria, in 1898, out of 16,963 patients treated without serum, 6,697, or 39.30 per cent., died; while out of 15,333 treated with serum, 2,428, or 15.83 per cent., died. In Vienna the mortality from diphtheria is only one-third of what it was before the introduction of serumtherapy in 1895. The number of deaths were 1,578 in 1892, 1,691 in 1893, 1.337 in 1894; since the employment of serum they were 695 in 1895, 611 in 1896, 568 in 1897, and 520 in 1898. It is of the greatest importance to employ the serum at the onset of the disease. Among the patients treated by serum on the first and second day, only 7.6 per cent. died; of those who were treated on the third day, the mortality was 15.56 per cent.—*American Medicine.*

The Czar of Russia has paid a graceful tribute to the medical profession of that country. He has decreed that all physicians giving instruction to the sisters of charity in Red Cross institutions, and all who are connected with dispensaries or other institutions in which the poor are treated free, shall have the rank of office in the imperial service with all the privileges thereof.

Dr. Walter Myers, of the Liverpool School of Tropical Medicine, who has been carrying out investigations of yellow fever, has fallen a victim to his scientific devo-

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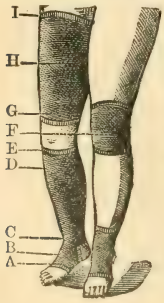

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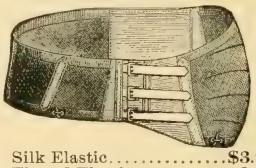

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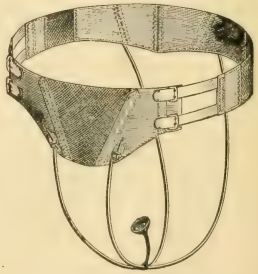

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Though operations on patients under hypnotic influences is no new thing, it certainly has not happened to many medical men to repair a vesico-vaginal fistula with the patient under complete anæsthesia obtained accidentally and without premeditation. The facts are given in the St. Paul Medical Journal for May, and it is explained that the patient was of a yielding nature, and implicity obeyed any instructions. The parts in the neighbourhood of the field of operation were infiltrated with a 2 per cent. solution of cocaine, and the woman was told she would have no pain and must keep absolutely quiet. She obeyed so thoroughly that it was quite forgotten for some time that the operation was being conducted without a general anæsthetic. In the course of the proceeding the practitioner had occasion to make some remark to the patient, when it was noticed she made no answer; she was on examination found to be sleeping soundly, with normal colour, pulse, and respiration. On being awakened she complained of feeling sleepy, and sank back into a sound slumber on a few passes being made over her face. She suddenly woke as the last suture was inserted, and left the consulting-room after the operatioh still complaining of sleepiness.—*Medical Press and Circular.*

Scarlatina.

One of the graver dangers of scarlatina is in the invasion of the mucosa of the nasopharynx by bacilli causing scarlatinal sore throat, viz., streptococci. Seibert uses for this condition a prescription composed of tincture of iodin, 2 grams; potassium iodid, 1 gram; distilled water, 120 grams; carbolic acid, 10 drops. A teaspoonful of this mixture is administered every hour. An experience of twenty years has failed to show any carbolic intoxication with this mixture. Mild iodism and slight gastric pains may temporarily be produced. To clean and disinfect the infiltrated mucosa he employs irrigation with 1 to 5 per cent. warm solution of ichthyol repeated every six hours where the infiltration begins to obstruct the passageway between the nares. Where these are insufficient, more vigorous measures are required. During the past year he has treated six cases with local applications of 50 per cent. resorcin solution in alcohol, which he has employed for the last eight years for the treatment of post-nasal catarrh in infants and children. He reports a case of scarlatina nasopharyngitis treated with this prescription. He considers it imperative to attempt to destroy the pathogenic bacteria in scarlatina whenever they come within our reach and these resorcin-alcohol applications have proven themselves harmless and are indicated, he considers, whenever the nasopharynx becomes involved.—*Journal American Medical Associaiion.*

The Clinical Diagnosis of Carcinoma of the Esophagus and the Tecnics of Gastrostomy.

C. G. Cumston, Boston, believes that the site of carcinoma of the esophagus explains the frequency of the complications arising during its progress. According to the organ which it attacks, the disease takes on a different clinical aspect, with symptoms, progress, and an end which are quite characteristic, and which he classifies. He divides them into five groups, which are briefly described. The first is the classical simple type of the affection which presents no complications, and which is far from being uncommon. The second group, which is the most frequent, he calls the tracheo-bronchial type, not only on account of the extensive and intimate relationship that the esophagus has with the trachea and the large bronchial tubes, but also on account of the tracheo-bronchial lymphatic glands, which are often involved by a metastasis. The third group of cases may be called the laryngeal, and under this title may be classed two forms, one being the result of extension of carcinoma to the mucous membrane, muscles, and cartilage of the larynx, while the second is due to the compression or inclusion of the larygeal nerves. The last group is the cardiovascular form. Owing to the intimate relation of the heart and large vessels with the esophagus, in many cases where this organ is the seat of carcinoma they rarely escape lesions, and we consequently often meet with complications either of the heart or pericardium, the aorta, the carotid, the inferior thyroid artery, the brachiocephalic trunk, the vena cava or the subclavicular veins.—N. Y. Medical Journal, Sept. 14, 1901.

In the list of candidates for the post of interne of the Paris hospitals who have been successful in the recent examinations there occurs the name of Mlle. Marthe Francillon-Rouville, who gained the fifty-second place among more than 600 competitors. This lady is according to the Progres Medical, the first French-woman who has obtained the much-coveted title of interne des hopitaux.

Oil of cajuput in strangulated hernia, 1 drop every half hour for 24 hours, has displaced the knife in many cases.

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(Aqua fluoroformii), tasteless, not toxic nor irritant. Dose, tablespoonful four times daily. In phthisis, tubercular infiltrations, local tubercular lesions of the glands, joints or skin (lupus). Sample (1 lb.) sent to physicians on receipt of one dollar.

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Malaria and the Deadly Mosquito.

The theory that the spread of the deadly malarial fever is due to the bite of the mosquito would appear to be gaining ground, says a London Weekly.

Out of the 250 known species of that insect only one (the anopheles) is found to be the aggressor, and of these it is only the female that works the mischief on the human subject.

Major Ronald Ross has just started on an expedition for the West Coast of Africa on behalf of the Liverpool School of Tropical Medicine, his principle object being to determine without a doubt the theory of insect propagation of malaria, and so far as possible to set in hand experiments for the extermination of the mosquito.

A house like the one which proved such a success in the Campaign of Italy has been fitted up and similar rules to those which guided the scientists on that expedition will be adhered to by those undertaking this one to West Africa.

No doubt, if the draining of these infested districts could be compassed, a very great blow would be struck at the terribly rapid increase of these pestilential insects. The female deposits her eggs (at the rate of 300 every three days!) on the surface of stagnant pools and in swampy places.

The Greeks Romans drained their swamps and low-lands in very early times. Even before those times Eastern nations forght fever by draining off stagnant waters from unhealthy places and purifying drinking water.

But in the tropics it is not always possible to resort to drainage, and in that case kerosine oil should be poured upon the surface of the mosquito haunts.

Young mosquitoes require to come to the surface of the water to breathe; and if the water is covered with oil, be the coating ever so thin, they at once succumb to the fumes of petroleum and are suffocated.

Major Ross intends to prepare a malaria-haunted district in the dry season by poisoning or filling up all breeding places of the anopheles mosquito within a given area Thus the insect should be effectively banished from the area in question; and if the experiment succeeds it will soon be possible to render certain spots on the West Coast immune from the scourge which has made it so fatal to Europeans.—*The Indian Lancet*, Aug. 19 1901.

Ten blind physicians, it is said, are active practitioners in the United States.

Ancient Antecedents of Surgery.

It must be difficult for most readers in this country to realize that in England the surgeons still hobnob with the barbers, and that members of the two "professions," still regard each other as fellow-craftsmen. This odd relationship has just been illustrated by the address delivered by Sir William MacCormac on the occasion of his receiving the Honorary Freedom and Livery of the Barber's Company in London. This fellowship, says the Philadelphia Medical Journal, had its origin in the remote past, at a time when the barbers were the only recognized surgeons, or "barber-chirurgeons" of the country. A relic of their surgical prerogatives still lingers in their practice of leeching, bleeding and cupping, and their sign with its red stripes is said to indicate their gory occupation (usually referred to the Serpent Symbol of Æsculapius). In England the tendency is to adhere to tradition and to hold on to old ways and customs, and so it came about recently that the barber's guild had for its chief guest a distinguished surgeon whose career and attainments do not at all suggest anything tonsorial.

But the modern Company of Barbers, we suppose, must not be taken too seriously. It seems to be celebrated for its antiquity and for its old silver plate rather than for the art of hair-dressing. We doubt whether any of its members have to make their living by cutting hair and shaving. Sir William MacCormac in his address tells us that the Guild of Barbers in London is of such ancient foundation that its earliest record cannot be traced. It dates from the Thirteenth Century. At first it had even a religious character, as the barbers used to assist the monks to perform operations. This must have been in still earlier days, for the edict of Tours, in 1163, forbade the priest to shed blood. In 1462 a charter was obtained, and in 1540 the surgeons (an insignificant body) became merged in the Barber's Company. From this time, for two hundred years, the surgical practice and teaching of England were in the hands of this Guild. Its members were surgeons to the Kings and they were content to bear the humble title of "barber-chirurgeon." In fact, they rejoice, as their descendants appear to rejoice to this day, in what to outsiders seems to have been a somewhat plebeian origin. The surgeons were not formally separated from the barbers until 1745, when they formed the Company of Surgeons, and this company became eventually, in 1800, the College of Surgeons. In France things were much the same, and the celebrated Ambrose Pare, who was surgeon to five successive kings of France, was a mere barber surgeon. The practice of surgery was held in low esteem as compared with the practice of physic, and, as Sir William MacCormac says, it did not advance much from that time until the evolution of antiseptic surgery toward the end of the Nineteenth Century.

Harmony Among the President's Surgeons

One of the sensational papers in this city has been endeavoring to make out that continual bickerings disgraced the surgeons who were in attendance upon President McKinley. The charges, receiving at first no notice from the victims of the journal's mendacity, became finally so malignant that the gentlemen attacked were forced to make a formal denial, and have issued the following statement:

"The undersigned, surgeons and physicians, who were in attendance on the late President McKinley, have had their attention called to certain sensational statements recently published in the daily papers, and particularly in one New York paper, indicating dissention and mutual recrimination among them. We desire to say to the press and the public, once for all, that every such publication and alleged interview with any of us containing criticism of one another or of any of our associates, is false and is nothing but scandal mongering. We say again that there was never a serious disagreemant among the professional attendants as to any of the symptoms or as to treatmen of the case, or to the bulletins which were issued. A very unusual harmony of opinion and of action prevailed all throughout the case. The unfortunate results could not have been foreseen before the unfavorable symptoms declared themselves late on the sixth day, and could not have been prevented by any human agency. Pending the completion and publication of the official reports of the post-mortem examiners and of the attending staff, we shall refuse to make any further statements for publication, and alleged interviews with any of us may be known to be fiictitious. (Signed), Matthew D. Mann, Roswell Park, Herman Minter, Eugene Wasdin, Charles G. Stockton."—*Medical Record.* Sept. 21, 1901.

A case of delirium tremens is reported, where a fatal result seemed imminent. The hot normal salt solution, nearly a quart in quantity, was introduced into the median cephalic vein, with immediately beneficial results and rapid recovery.

IN DIABETES TRY PROTONUCLEIN SPECIAL TABLETS.

TROPHONINE,

a palatable and nutritious liquid food, contains the nutritive elements of beef, nucleoalbumen, and wheat gluten, so prepared as to be readily absorded and aid almost immediately in the process of reconstruction. It furnishes the sick with the largest possible supply of nourishment and with the minimum tax on the digestive organs.

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PROTONUCLEIN

acts by increasing the number of leucocytes, destroys toxic germs, increases the inherent resistance to disease, quickens glandular activity, arouses the nutritive forces, gives tone to the system, and stimulates cell-life throughout the organism.

IN MALARIA TRY PROTONUCLEIN SPECIAL TABLETS.

IN ALL WASTING DISEASES TRY PROTONUCLEIN SPECIAL TABLETS

PEPTENZYME

is the only perfect digestive. It digests every variety of food. In physiological activity it presents the active and mother ferments of the entire group of digestive organs. It aids digestion by furnishing an additional supply of protoplasmic material out of which active ferments are elaborated, and perfects the process by increasing cellular activity.

The Use of Protonuclein Special Powder should be preceded by Spraying the Diseased Surface with Zymocide.

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Death of the Physician Who Originated Present Life-saving Service.

Dr. William Augustus Newell, who died at his home in Allentown, N. J., recently, at the age of eighty-two years, was the originator of the life-saving service of the United States. It was he who conceived the idea of shooting a life line from the shore to a stranded vessel. This was the initial step in the establishment of the service, and from it has grown the thoroughly organized system by which more than 100,000 human beings have been rescued from death and many millions of dollars of property saved. Dr. Newell, then a member of the National House of Representatives, secured the first appropriation of $10,000 in 1848, for a life-saving service on the New Jersey coast. With this money life lines, surf-boats, and the more crude appliances were provided. The system has grown until now there are 269 stations along the shore lines of the United States. Of this number, 194 are situated on the Atlantic and Gulf coasts, fifty-eight on the shores of the great lakes, sixteen on the Pacific coast, and one at the falls of the Ohio, Louisville, Ky. Dr. Newell was born in Franklin, Warren county, Ohio, on September 5, 1819. His ancestors were from New Jersey, and medicine was the prevailing profession in the family. He graduated from Rutgers College in 1836, from which he afterward received the degree of LL. D.; he took his M.D. in the medical department of the University of Pennsylvania in 1839. He was elected to Congress in 1846 as a Whig, and served three terms. He was elected Governor of New Jersey for three years in 1856. He was again elected to Congress in 1864 as a Republican, serving one term. In 1877 he ran for governor against George B. McClellan, but was defeated. When John Quincy Adams fainted in the House of Representatives he fell into Dr. Newell's arms, and was attended by him until death, thirty-six hours later. Dr. Newell attended Willie Lincoln during his illness, and rendered other professional services in the White House.—*New York Medical Journal.*

Charlatanism.

It is a curious characteristic of human nature, or of a great deal of human nature, that people who would grudge paying a cent to a regular medical practitioner will cheerfully pay a great deal of money to an irregular practitioner. Go where you will and you will find the quack prosperous. His rooms are full of patients, and his patients are full of faith. Men and women will buy wondrous remedies from travelling mountebanks who do not disdain to sing a comic song on the wagon from which they peddle their nostrums. Natural bonesetters and long-haired "Indian doctors," and botanic doctors ignorant of botany, and faith healers of many kinds, abound; and the trade of most of them is good. The world likes to be healthy, but it loves to be humbugged. If a thousandth part of the blind, unhesitating faith that cleaves so readily to incompetent, and often illiterate, practitioners of fantastic means of healing were bestowed upon religion, there would be no complaints that the churches are not filled. But often those who are full enough of doubts of the supernatural so far as it relates to their souls are quick to believe in an almost or altogether supernatural gift of quack salves to cure the body. Legislation can do but little if anything to interfere with the gains of the medical pretenders or of the professors of visionary and semi-religious medical "science." You cannot legislate away a state of mind; and the state of mind of thousands, perhaps millions of persons, is one of crass credulity in humbug. Their delusions and illusions can be removed only by experience and a wider knowledge. They take their own lives and the lives of their families in their hands when they neglect the methods and the agents of modern medicine and surgery and resort to the moonshine of Christian "science," or to any other crank system, or to any individual quack. But you cannot prevent people from killing themselves if they have the will; and you will only stimulate faith in quackery by giving it a chance to yell "Persecution!" A private arrangement between patient and "healer" will nullify any provision of law forbidding the "healer" to heal for a consideration. A gift can take the place of a fee; and "gratuitous" treatment can be acknowledged with a gratuity. The best way to deal with a delusion is to let it alone. Common sense must win in the end.—*New York Sun.*

Ecthol exerts a decided influence on eczema, and can be used to advantage in several different conditions. In cases of moist and inflamed lesions, with great soreness and irritation, it may be given in teaspoonful doses; and the more markedly the eruption is purulent the more decided the effect. It may also be used with manifest advantage when the patches are greatly infiltrated and the inflammation is sub-acute in character.—American Journal of Dermatology and Genito-Urinary Diseases.

The Oncome of Age.

There are many conditions of advancing life in which

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Assimilative Organs. **Circulatory Organs.**

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Dr. Milner Fothergill wrote: "It (**Fellows' Hypophosphites**) is a **good all-around tonic**, specially indicated where there is **Nervous Exhaustion.**

SPECIAL NOTICE:—**Fellows' Syrup** is advertised only to the Medical Profession; is never sold in bulk, and physicians are cautioned against worthless substitutes.

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Beta-Eucain Infiltration Anæsthesia.

In an elaborate paper entitled "Experimental Investigations on Infiltration Anæsthesia," from the Private Surgical Clinic of Dr. H. Braun, in Leipzig, Dr. Paul Heinze, of Dresden, thoroughly examines into the value of the various local anæsthetics, fixes the limits of their efficacy, and ascertains the factors which are essential to the determination of the usefulness of a material to be employed for the production of anæthesia (Archiv fur pathologische Anatomie und Physiologie und fur klinische Medicin", Vol. 153, No. 3. This is the first comparative investigation which has been made in a thoroughly science and unimpeachable manner.

Dr. Heinze demonstrates beyond peradventure that a most important factor, and one common to all watery solutions employed for infiltration anæthesia purposes, is that of osmotic tension, which determines the occurrence either of swelling, the solutions giving up water to the tissues, or shrinking when they withdraw fluid from them. A definite concentration of any solution, however, is osmotically indifferent; that is to say, it causes neither of these effects, has an osmotic tension exactly equal to that of the tissue fluids, and is therefore called isotonic to them. Pure water alone is an intense irritant to the sensory nerves, and manifestly damages the tissues; and anæsthetic solutions diluted with it beyond a certain extent have the same effect, and render the injections painful. After the lapse of a little time this pain may be masked by the specific action of the anæthetic, but it returns as after-pain when this ceases. Hence arise the painful infiltrations which may persist for days.

Heinze has demonstrated that the addition of ordinary cooking salt in proper proportion to the water in which the anæsthetic agent is dissolved diminishes or entirely obviates this source of irritation. For human beings a saline solution of nine-tenths of one per cent. is osmotically indifferent and isotonic with the tissue fluids. Slight deviations from this concentration, however, are insufficient to cause any appreciable pain.

He also found that the temperature of the body was that most appropriate for the injections. Colder and warmer solutions had unmistakable painful effects.

The author believes that the alterations caused in the tissues by the injections are at least as important as their direct anæthetic effect, and that for the perfect application of the infiltration anæsthesia method, solutions that cause any irritation at all are to be absolutely rejected. In practice we have to deal mostly with tissues that are hyperæsthetic, and all the irritative factors must not merely be covered up and compensated for, but they must be entirely excluded.

Hence all materials that are in themselves irritant are unsuitable in any concentration for the injections. Such a substance as bromide of potassium, for instance, is a painful anæsthetic per se. On the other hand pure and specific anæsthetics may be irritant if attention is not paid to the physical properties of the solutions that contain them. It is a mistake to diminish the concentration of the solution too much with the idea of calling into play the anæsthetic properties of the swelling that it occasions.

The two most commonly used local anœsthetics, Beta-Eucain and cocain, alter the osmotic tension of the water in which they are dissolved, more especially in the exceedingly small proportion in which they are usually employed, but very slightly. They are very far from making a solution that is isotonic with the tissue fuilds. This is best effected by the addition of an indifferent salt to the water of solution. Heinze employed a 0.6 per cent. sodium chloride solution; but any other indifferent salt can be used.

As the pure anæsthetic to be employed in the above solution, Heinze not only prefers Beta-Eucain,but concludes that it is the only drug to be used for the production of infiltration anæsthesia. It is fully equal to cain in its paralyzing effect upon the nerves and its almost absolute non-irritativeness, and is preferable to it for various other and well-known reasons. He recommends for the infiltration anæsthesia the following formula:

Beta-Eucain	0.1 gram (1½ grains).
Sodium chloride	0.8 gram (12 grains).
Distilled water	100.0 grams(3¼ fluid oz,

Such a solution is permanent, and can be boiled and sterilized at any time and as often as is necessary. It causes absolutely no swelling or irritation of the tissues; the Beta-Eucain alone is the anæsthetic factor. The addition of the salt is not for the purpose of effecting anæsthesia, as Schleich erroneously believed, but to prevent the irrttative symptoms, and to permit the specific anæsthetic action of the drug employed to be manifested alone.

It has been employed for months now, more especially for the infiltration of inflamed tissues, and has been found to be absolutely superior to the solutions recommended by Schleich. It is imdortant that it should be used warmed to the body temperature. It is then absolutely non-irritating, and purely paralyzing.

The Charlotte Medical Journal.

Vol. XIX. CHARLOTTE, N. C., NOVEMBER, 1901. No. 5.

Asthenopia in Convalescence and other Conditions of Lowered Vitality.

By Gaillard S. Tennent, M. D., Asheville, N. C.

The accommodation of the eye for work at the near point, being dependent upon a complicated system of nervous reflexes and muscular coordinations, requires the existance of a perfect balance between the two forms of energy—nervous and muscular. It is well known that in good health, the nerves and muscles being perfectly adjusted otherwise, a small mechanical defect in the eye interferes locally with this balance, and causes endless trouble.

It is not surprising, therefore, that in the complete exhaustion following grave febrile diseases and the less well marked neurasthenias attending various morbid conditions, we find still more serious interference with this function.

A close study of our case books will show this to be a fact. A very large proportion of asthenopic patients fall into our hands as a result of an attack of illness, acute or chronic, or else belong to that class of persons known as delicate, or who lack constitutional tone or vigor. It will also be found that many of these patients suffer from symptoms of retinal exhaustion in varying degree.

A study of 225 refraction cases taken *seriatim* from the writer's case book, in all of which more or less complete histories were obtained, shows that in 49 instances, or in 22 per cent. of the cases, some acute illness brought on or aggravated the asthenopic symptoms. In 33 instances, or 14 per cent. the trouble was due to delicate constitutions or impariment of vigor by chronic disease or other reducing conditions. This makes a total of 82 cases or 36 per cent. of the whole number.

It is probable that measles and other diseases of childhood and youth were accountable for many more, but it is generally impossible to go back this far with certainty, and probable causes are not considered here.

Statistics are always unpopular, but some valuable points can be gleaned from the following brief digest of causes:

Acute,	
Typhoid,	18
Tuberculosis,	12
Measles,,	6
Scarlet Fever,	5
Grippe,	2
Malaria,	2
Cerebro Spinal Fever,	2
Vaccination,	1
Whooping Cough,	1
Total,	49
General.	
Delicate Constitution,	15
Neurasthenia,	5
Nursing,	4
Menopause,	2
Asthma,	2
Uterine Disease,	2
Heart Disease,	2
Rheumatism,	1
Total,	33

It will be noticed that among the acute conditions, typhoid easily heads the list, moreover, it is especially important in that the asthenopia occurring in the long periods of convalescence so often following it, is very severe and intractable. Tuberculosis, which is placed among the acute diseases on account of the similarity of eye symptoms, comes second. Of the six cases attributed to measles, three occurred in adults, and this prolific promoter of eye trouble fails to show up for the reason given above.

Of the non-acute conditions, nursing is most interesting, the eye symptoms sometimes being the only evidence to the patient of the drain on her vital powers. Neurasthenia is probably as important as typhoid in this connection. However, where the history is obtained by general questioning and observation, as is usually the case in refraction work, it is often lost sight of on account of the ignorance of the patient as to his real trouble and the infrequency of its positive diagnosis by the family physician.

Little need be said as to the symptoms and treatment of uncomplicated eye strain in these conditions. The pain, headache etc., are usually more annoying and persistent, and, despite the most careful correction of refractive errors, the convalescent often has to be content with a limited

amount of eye work till nature reasserts herself.

Those of delicate organisation or defective nervous system and the subjects of chronic disease may have to regulate their whole life according to their capacity for eye work.

In myopes we may look for an increase of their disease and its symptoms after a severe illness, while it is not uncommon to find temporary or even permanent symptoms of myopia where it had not existed before.

The treatment only differs from that of ordinary cases in that we should be, if possible, more scrupulous in looking for the smallest errors of refraction under thorough cycloplegia, and more patient in trying to correct these errors when found. In some cases, especially where the general muscular system is much weakened, the patient, though youthful, will be found presbyopic, and a reading correction of a half or one dioptre will have to be prescribed temporarily. Of course this is not true presbyopia, but only a passing condition which resembles it in some respects.

In nursing women it is best to wait till the child be weaned before testing the refraction, though this condition does not preclude the use of atropine in sufficient strength to get the desired result.

In the cases quoted above, the examinations in many instances extended through several weeks, sometimes even months.

The results of this extreme care in examination and correction are gratifying and well worth the expenditure of energy, both to patients and physician. Fifty-four of the eighty-two cases have been followed, and of this number, 47 have been entirely relieved or decidedly benefitted, while only 7 have remained stationary.

Retinal Exhaustion.

The most important part of the subject still remains to be dealt with, namely; the frequent occurrence of retinal exhaustion or retinal asthenopia, which in well marked form, was the most prominent and troublesome feature in 14 of the cases. Of these, 4 followed typhoid, 3 were in tubercular, 2 in neurasthenic patients, and 3 of the remaining 5 cases followed acute diseases.

This condition has never met with the general attention it merits, most of the text books only mentioning it, but the possibilities in the way of treatment are so great that a close study of the subject cannot fail to be profitable.

There are no discernable lesions or changes in the retina other than the chorio-retinal disturbance around the disc seen in most severe cases of eye strain in youth. The trouble consists, according to Wilbrand, in a "rapid diminution of excitability in the visual substance of the retina as compared with what is present in physiologically normal subjects." In other words, the visual substance is used up by continued eye work more rapidly than it is assimilated or formed.

The simple subjective symptoms do not differ materially from those of ordinary eye strain. In severe cases the patient is unable to use the eyes for near work longer than one or two minutes at a time, or to maintain fixation of a distant object; while in others the eyes may be used for twenty or thirty minutes or even longer without pain. The sensation of pain is usually described as that of needless piercing the eyeball from behind, and is generall attended by dull headache. In the morning and after long and refreshing sleep or rest in a darkened room the eye is capable of comparatively much longer use than at other times.

The defective features are only found by a thorough examination of the visual field, which brings out one or two series of phenomena, according to the severity of the case: 1.st Rapid tiring of the field; 2nd. General concentric shrinkage of the field for white, less marked for colors, in addition to the rapid tiring.

1. The patient is made to fix the central point of the perimeter, winking or closing the eyes as little as possible; a small object is then moved slowly back and forth along one meridian (preferably the horizontal). It will be noticed that the points of appearance and disappearance constantly encroach uopn the centre, in one or two minutes reaching the 25 deg., or 20 deg., mark, the rest of the field being then enveloped in fog.

2. The field is found to be limited concentrically, the limitations varying decidedly with the conditions of examination. The field is considerably enlarged if the light be slightly increased, or larger objects be used, and likewise if it be taken after prolonged rest in the dark. The color field is not unusually shrunken in the same proportion, but is liable to variations.

These distinctive features may be found in varying degree, gradually disappearing with the return to normal vigor, or persisting to the great annoyance of those who lapse into chronic neurasthenia.

The diagnosis where the disease follows an acute illness is usually made with ease. Where it complicates some obscure or chronic trouble, or is, seen after a duration of several months, it may be taken for simple glaucoma or incipient optic atrophy.

The conditions of the field described above may strongly resemble those met with in the early stages of simple glaucoma before the tension becomes permanently increased and before the appearance of cup ping. However, in early glaucoma we can usually get a history of halos and attacks of foggy vision, and can observe arterial pulsation of the disc, with a gradually narrowing field. In retinal exhaustion none of these symptoms are found, and the field has usually reached the limit of contraction when the patient is first seen, further changes, if any, being for the better.

Incipient simple optic atrophy is not apt to be confounded with exhaustion if the examination be thorough. The blanching of the disc and lowering of visual acuity in atrophy have no parallel in exhaustion, while to the careful observer the early reduction or loss of color vision and sector shaped defects do not resemble the peculiarities of the field described above. If the atrophic patient has been taking large doses of strychnia there may be more similarity in the symptoms, so it is always well to inquire.

The treatment of cases showing signs of exhaustion consists in: (a) hastening the return of normal bodily strength, (b) special measures for relief of eye symptoms and (c) regulation of eye work.

(a) This condition almost invariably means that convalescence will be retarded by other symptoms of general neurasthenia, therefore, strong tonics and careful nourishment are indispensable. Regular and increasing exercise should be taken, interspersed with long hours of rest in a darkened room. The surveillance of the patient should continue till return of practically normal limits to the field of vision.

(b) Errors of refraction should be fully corrected under atropine, smoked lenses being given for out-door use. Symptoms of presbyopia should be looked for, irrespective of the patient's age, and the proper spherical addition made for near work. Strychnia in large doses is well borne, noticeably enlarges the field and permits of increased use of the eyes.

(c) If there is a probability of early recovery of general strength eye work should be given up for the time, but if the recovery is long drawn out, the patient must be encouraged to use the eyes at regular intervals, beginning with a very few minutes at a time and gradually increasing the periods as long as this can be done with comfort. This exercise of the eyes should take place after sleep or the resting hours.

Close attention to these and other small details will always effect a change for the better which raises the spirits of the patient and hastens recovery. In acute cases where the general condition improves steadily, we may safely predict a return of normal visual power, but when the affection is due to chronic and obscure causes we have to be content with slight and gradual improvement. Even here, through, the hopefulness wrought by slight changes may improve the whole condition of the patient.

The accompanying charts were made in the case of a young man, aged 24, suffering from typical retinal exhaustion and general neurasthenia following typhoid. Astigmatism, which had never been fully corrected, had troubled him for years. The typhoid was contracted in February, 1900, after a long period of hard work in machine shops and night school, recovery only beginning in June and progressing slowly. He was first seen on September 26th, at which time he was unable to use his eyes longer than two minutes without severe pain. He had a fair appetite and digestion, but was so weak that he could only walk a half mile by stopping to rest several times, spirits in a corresponding state of depression.

Upon examination nothing abnormal was found save undue sensitiveness of the heart's action to any exciting cause and a generally flabby muscular system- Six days under atropine brought out 1. D of hyperopic astigmatism in each eye, which was corrected, not being able to read with this, 1. D Sph. was added to it for near work. With this he began to read twice daily, ten minutes at a time, increasing to twenty minutes in a few weeks.

Strychnia was given intermittently throught the early winter, and recovery of general strength progressed well but was retarded by an attack of grippe. After eight months' treatment he was able to do five hours of farm work daily and two hours' reading with comfort.

He is now suffering from complete nervous and physical exhaustion due to overexertion on the bicycle, but the relapse as far as the eyes are concerned is not nearly so complete, showing a marked improvement in this respect.

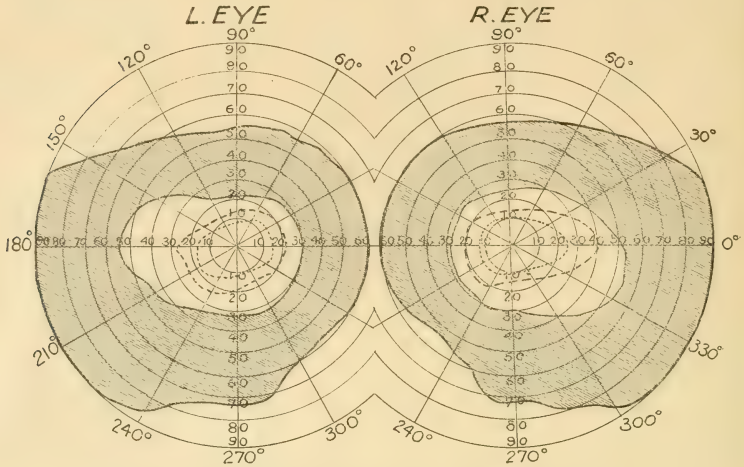
The charts, which are typical, were taken about the beginning of improvement and six weeks later, the last one showing a slight change for the better.

CONCLUSION.

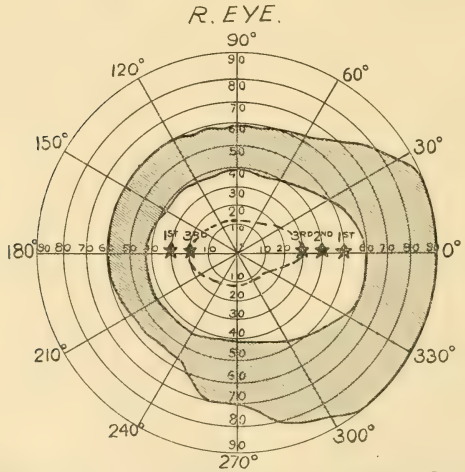
The following conclusions are deducted from the above study:

1st. General disease is the aggravating cause in a large proportion of asthenopic cases.

2nd. Grave diseases, notably typhoid



Case 467 Retinal Exhaustion, following Typhoid. 5 m.m. discs Brightest Daylight. ----- RED FIELD ..... GREEN FIELD Nov 30TH 1900.



Case 467. Under same conditions. Jany 14TH 1901. Stars represent limits of field after steady fixation of point, limits measured at end of each half minute. ------ Practical limit of field at end of 3rd half minute.

and tuberculosis, give rise to retinal exhaustion and other severe symptoms.

2rd. Retinal exhaustion is usually found with other neurasthenic symptoms and improves under patient treatment.

The Great Plagues of History.

By M. F. Carson, M.D., Griffin, Ga.

At first view, it may appear a matter for wonder, that there should be so wide-spread an interest in everything pertaining to the origin and dissemination of disease throughout the race.

Daily observation, however, reveals the fact that such interest is in reality well-nigh universal. Nothing, perhaps, so quickly engages the attention of the public as the account of some new disease, or the discovery of a new remedy vaunted as a panacea for human ailment, or the history of some great epidemic which has descimated —time and again—the populations of the nations of the past. We do not need to seek far, in order to discover the true causes of this anxious attitude of the public mind. It is at once obvious, that the universal law of death must ever lend a somber interest to all infirmities of the human organism; and hence it is, that all men, the wise and learned as well as the ignorant and narrow-minded, seize with avidity upon every shadow which gives the least promise of some delay in the inevitable termination of life.

The object of the present article is to recall the more striking features of the great pestilences of the past ages; to note the conditions of life under which they appeared; and, then, to refer to the success which has attended, and may yet attend, the efforts toward banishing such destructive maladies from society by an improved sanitation. It is of decided importance to understand what relation society sustains to the diminution of, not only the number, but also the malignancy of those deadly disorders which have so often afflicted mankind.

The great bubonic plague is now almost a thing of the past. It will, therefore, best illustrate the object in view by showing the influence which our improved state of society has exerted upon one of the deadliest of all the scourages which have made their appearance since the beginning of time. Then, again, the history of the plague is, in itself, a record of almost unparalleled horrors, and thus presents an absorbing interest to any reader. The story of its outbreaks reads like the thrilling tales of the old wars, and the scene of its visitations presented more ruins, left behind more victims than could be met with upon the bloodiest battle-fields the world has ever known.

In reviewing the history of this fatal scourge, I will consider it under the twofold division of—

First, the special visitations of the plague mentioned in history; and,

Second. the characteristics of the disease as a distinct malady,

glancing under the former, at some of the most noted occurrences in the description of individual scourges, together with the time and manner of the pestilential outbreaks; and under the latter at, 1st, the causes of the plague; 2d, its abnormal appearances both before and after death; 3d, its symptoms; and 4th, its treatment, together with the probabilities of success in the direction of preventive measures.

1st—The Historical Visitations of the Plague.

The plague, simple or malignant, is undoubtedly one of the most ancient maladies to which flesh is heir. It has shown a tendency to linger for a varying period of time in some special portion of the globe, the rest of the world being free, in the meanwhile, from its ravages. But it may be stated in general terms, that the periodic return of the plague has occasioned the most destructive calamities in every continent, except that of America, for a time corresponding with the entire history of the human race. It has been known by as many names as the variations in its type would naturally suggest; but these have only been variations of one great original disease, and each of these apparent changes has only represented a difference in the degree of malignancy caused by accidental surroundings. But whether we term the scourge before us the plague, or pest, or pestilence, we mean the same fell malady which has dealt out death with such an unsparing hand throughout almost every nation, from the Libyan deserts to the shores of the Caspian, and from the Irish Channel to the frontiers of the Chinese Empire.

In dealing with this disease, we must remember that we are not considering a subject which belongs exclusively to the past. Although bereft of much of its ancient terror, it yet shows itself by no means rarely, and at times with its characteristic malignancy, in Russia, Egypt, India, China and Mesopotamia.

The earliest history of the bubonic plague is veiled in obscurity. It is useless to attempt to follow it in its dim, traditional wanderings in those remote times before systematic observations were regarded of any impor-

tance, or suspected of being such inestimable value to posterity. It has been claimed, indeed, that we have no direct record, earlier than the third century before Crist, of any distinct pestilential outbreak. But if we accept, as indeed we must, the Mosaic account of some of the Egyptian plagues, which manifested the distinctive characteristic of afflicting both man and beast with most loathsome sores, we are carried back to the very dawn of history, in our efforts to trace the beginnings of this ravaging pestilence. The record of these earlier plagues seems to point to their identity with those later bubonic plagues, which manifested the same malignant fatality in after ages, not only on the banks of the Nile, but in many other parts of the globe.

But to those who think that as remote an antiquity is entirely too fanciful, or that those old Mosaic accounts are not sufficiently explicit, satisfactory evidence can be presented of an age that is at least respectable, by referring them to those later records whose historic accuracy of description and explicitness of detail are wholly beyond dispute.

Thus, during the reign of Trajan, the physician, Rufus of Ephesus refers to the writings of Dionysius, who lived in the third century before Christ, and mentions the fact that these writings contain a description of an epidemic malady of pestilential buboes, which appeared in his day, in Libya, Egypt, and in Syria.

Rufus, who appears to have been one of the most noted physicians of his time, regarded the epidemic recorded by Dionysius as identical with the pestilence which ravaged these same countries during his own lifetime.

The historian, Livy, records a similar plague, which destroyed more than a million people in Africa alone.

The great antiquity of the plague in Egypt, and in other portions of Africa, would seem to be conclusively established by the frequent mention of such pestilences in so many of the most ancient records. In fact, Africa was looked upon for ages as its natural home, and it was not until the sixth century of the Christian era that the bubonic plague, in the reign of Justinian, first crossed the Mediterranean and made its appearance upon European soil. Although confined to Asia and Africa for such a vast period of time, when it did reach Europe, it took up its permanent abode.

From this period of European invasion begins that steady march of the pestilence, which moved forward with varying malignancy, it is true, but with steady persistency, for a period extending over eleven centuries. Nothing could stop, or even check, its fatal progress. Then, too, it showed a capriciousness in the times and places of its outbreaks, which seemed to defy every effort to master its dark and mysterious nature. If apparently checked in southern countries, after raging during an entire winter, it would at once be supposed that such a check resulted from the increasing heat and dryness of the summer months. But alas! for such a theory! Its term of life would be short, indeed, since the awful scourge would suddenly reappear in the nations of the north, seemingly warmed into new life and power by that very heat which had just been supposed to have given it its death blow in another part of the world.

No law could be made to control it, just as no boundaries could be found to limit it. Wherever man, with his poverty and its attendant uncleanness, was found; wherever war, with its fields of blood and its thousands of decaying dead, poured forth its awful horrors and potentous crimes over the face of the earth, sweeping like a besom of destruction over the fairest creations of man; there the noisome pestilence would follow, transforming that which was already a purgatory, into such a hell as only a Dante could picture in his awful Inferno, while portraying the hideous ravings of the damned,

The sixth century was one succession of almost unbroken horrors. We find the plague, in the early part of that century, beginning in Egypt, and thence passing into Constantinople, whence it finally reached the Italian peninsula.

The outbreaks during this time had a most disastrous influence upon the declining fortunes of the Roman Empire. Perhaps no other cause, so temporary in its nature, contributed so effectually toward the overthrow of that mighty fabric, which had already begun to crumble away. Threatened on every hand by innumerable foes, shaken to her foundations by the countless irruptions from the north, the imperial city of the seven hills, the haughty mistress of a vanished world, was already learning to bow her lofty head. It needed but little to complete her final ruin.

The last fatal blow with crushing force; and that empire which would yield to no mere human strength, which the power of a world could not shake, which was drunk with the blood of a hundred nations, fell at last beneath the stroke from the hand of the Omnipotent God. The pestilence appeared in the midst of other calamities, and with a complete dismemberment of society, a disunion of every bond, confusion and terror, sufferings and death, until the whole

of Southern Italy was well-nigh depopulated and fell an easy prey to the hordes of Lombardy.

The chief outbreaks during this century took place in Constantinople in the years 542 and 543, and again in 565; in Liguria in 571; while in 590 it made its appearnce in Rome itself, during the pontificate of Gregory the Great. The death-rate in some of these visitations was almost fabulous. During its outbreak in 543, in Constantinople, ten thousand persons are said to have perished in a single day. In fact, there was scarcely a year toward the latter part of the sixth century which could be said to be entirely free from this fearful pest. It was pre-eminently a century of terror and gloom. It may well be called the dark century of the age of night, in human history.

To increase the direful gloom and dread despair attendant upon such an unbroken succession of pestilential horrors, we are informed that the plagues were accompanied by the most startling natural phenomena. Volcanic eruptions, tremendous cyclones, destructive earthquakes. and more portentious than all else, fugive comets with gleaming tails were seen shooting athwart the sky, or hovering like gigantic monsters of doom over a fated world.

We can well believe that which history records as a fact, that the impressions made upon the survivors, by these scenes of awful death, were so profoundly despairing in their nature, as to give rise to the general belief that the end of the world was at hand.

Passing onward from century to century, we find during the succeeding ages many visitations recorded, varying in type, it is true, but ever the same in the dark mysteriousness of its fatal power.

With this hasty reference to the appearance and reappearance of the plague, during these earlier periods, we will now pass abruptly from the sixth to the fourteenth century, when we will find ourselves confronted with the same old enemy, but wearing a new and still more hideous form.

During this century, the fourteenth of our era, the pestilence reached its culmination in deadly malignancy, and lead to the wildest anarchy and a complete abolition of all social law and order. It was during this period that the so-called Black Death made its first appearace, and began its awful work among the nations of Europe, rendering loathsome and hideous beyond description her most beautiful cities, and covering into one vast charnel-house her richest and fairest realms. Greece, Italy, Sicily, France, the Netherlands, Germany, England, and even the Scandinavian countries of the north all were alike afflicted with this fatal pest, which was, as we shall soon see, but another of the old plague which had proved so deadly in the past. We can perceive somewhat of the awful character of this visitation, and understand its unique position in the history of human disaster, when we learn that its devastations overturned all social order, broke down the ties of kindred and of home, subverted municipal law, and so completely depopulated the different nations of Europe, that hundreds of cities reverted to the crown through the death of every legal claimant, and many a princely title, and even kingly dynasty, became forever extinct.

The inimitable Boccaccio and the brilliant Petrarch have sketched in the liveliest manner many remarkable scenes connected with this series of pestilental horrors in some of the Italian cities. It is utterly impossible for us to-day to conceive, in any adequate manner, of the fatal influence which so much despair and suffering and death exerted in those awful times, upon the moral nature of man. Details too loathsome for utterance, scenes too revolting for human belief, are recorded by those old writers of the past, who were themselves eye-witnesses of the way in which purity was forgotten, every tie of brotherhood trampled in the dust, and even the Deity himself turned into a universal scoff, while on every hand were heard continuous revilings of divine mercy and love. When we read of husbands forsaking the wives of their youth, the mother fleeing wildly from the contaminating touch of the child to whom she has given birth, the lover shunning in terror the idol of his heart, our minds reel beneath the effort to grasp the hideousness of the picture, and our senses refuse to credit the possibility of such a distortion of human mercy and love. We would fain believe that we are listening to the wandering delusion of a mind weighted down by some hideous nightmare of gloom, or the maniacal revings of a brain consuming itself within the horrid and unearthly phantasms of its own creation, and gloating with diabolical malignity over the ruin and chaos, the blackness and crime, which its satanic delusions have turned loose upon this fairest realm of man, to pollute into an angel of darkness that beautiful and priceless soul created in the image of God. In moralizing over the conditions of human society in the midst of such visitations, our pride is humbled, and our confidence in human perfection in the midst of extraordinary trial and suffering is forever removed. We see that there are some evils too great to be borne; so great, indeed, as

to paralyze completely the heart of human society, and to crush in a moment through every barrier erected by centuries of progressive civilizatlon; evils, whose magnitude confounds the brain until reason totters from her throne, and human affection is turned back in its course, and even an Eden itself would be changed into a veritable hell.

A continuation of this record would be but a continued delineation of the horrors which I have already attempted to describe; and yet, the great Plague of Naples in 1656, and the great London Plague of 1664 and 1665 are at least worthy of a passing notice.

In the last mentioned outbreak, one hundred thousand men, and in the former more than three hundred thousand, fell victims to the dreaded pestilence. The London plague was accompanied by social disorders even wilder in their character, and by a moral depravity even more revolting in its aspects, than were manifested in any of the great plagues of the middle Ages. But with the exception that the dark features should be represented more hideous still, and the revolting details still more revolting, the same description will serve for this occurrence, which has portrayed, although slightly, the horrors and death attendant upon previous outbreaks of the same dread disease. Therefore, with the bare statement that even until the last decade, in our own century, the plague has continued to appear at times, in Egypt, Persia, India, and even in Russia, we will pass on to the consideration of the second division of our subject.

Second—The Nature and Character of the Plague as a Distinct Malady.

A disease which has cast such a baleful shadow across the long centuries of human history certainly appeals with unwonted power to the interest of all. No other affliction, except perhaps that of war, has played so important, though sad and fatal, a part in the great drama of human existence.

Unfortunately for us, the descriptions of the epidemics which occurred prior to the present century were, for the most part, the work of laymen. Or, if now and then, we come across an account transmitted through some medical observer, he has nearly always been a physician markedly deficient in scientific culture. In this way, we can glean only a partial and confused account of the ancient visitations of the plague. This is equally true of those which appeared in the Middle Ages. We find numerous descriptions of the effects upon society, but very meager accounts of the actual appearances of the disease in the unfortunate victim seized within its fatal grasp. But we have sufficient data, gleaned here and there, from the accounts of laymen and physicians to enable us to form comparatively accurate notions with regard to the nature of the plague, if we are willing to take the trouble to collate the evidence and systematize it into a definite form. This is the object in what is now to follow.

The references contained in the old classical historians, although representing the opinions and observations of non-professional men, and still quite sufficient to enable us to recognize the ancient epidemics as identical with the plagues recorded in medieval and modern times.

The most important fact to be noted at this point is, that the plague is a distinct, separate, unique disease. It is not, as supposed by some, merely an exaggerated outbreak of the cholera, smallpox, or some other of the more familiar epidemics of the present day. Almost every adequate authority joins in the belief that the plague is as individual and separate a malady as is diphtheria, tuberculosis, or leprosy. It is not desirable to discuss this point at length in such a paper as this, since it more properly concerns the disputes which are controverted among members of the medical profession alone. But the facts yet to follow, which are of a nature to be understood by all, will doubtless leave an impression upon almost every mind that the plague is certainly widely different from any of the diseases with which we Americans have ever come in contact. Each reader can thus draw his own conclusions, from the description of the plague, as to its effects and phenomena in the human body, as to whether it should be regarded as a distinct and peculiar malady.

The first accurate description of the plague which we have had in modern times, was that presented by the French in Egypt, and by Surgeon Colville on the Volga and Euphrates.

During the years 1837 to 1845, a corps of French physicians was sent out by the government to make a careful and scientific study of the plague, which was then ravaging Egypt and other portions of Africa. Their reports, together with the observations made by Colville on the plague which broke out in 1878 and 1879 on the Volga and Euphrates, contain information sufficient to satisfy any candid mind or any seeker after information relative to this dreadful scourge.

First—The Causes of the Plague.

We are confronted with the difficulties

which one is prepared to expect beforehand, when we attempt to trace out the etiology or causation of the pestilence. From a careful comparison of authorities, ancient and modern, we are convinced that the plague cannot be referred to any distinct causative factor, with the same satisfaction which we feel with reference to the majority of other diseases. Of course I am now speaking of the actual, visible, perceptible causes, those which create the influences in connection with which the special germ, immediately producing the disease, is developed. In the light of modern research, there can be no doubt that this malady, in common with all other epidemic disorders, is immediately produced by the lodgment of some special germ or microbe in the human organism, which multiplies with greater or less rapidity, dependent upon the surroundings as favorable or unfavorable to their development and growth.

This cause is here taken for granted. But it is of great practical interest, as well as importance, to know what conditions of life are also favorable to the production of the plague.

As hinted in the introduction, not only the treatment but also the prevention of this dire disorder, must necessarily depend in great measure upon the success with which the details of its causation are mastered, especially by the physician.

The most obvious and important factor in the production of the bubonic plague, is poverty, with all of its attendant evils. The filth, uncleanliness of person, poor drainage, bad food and improper hygiene in general, all of which appear more or less in the life of those subjected to great and continued poverty, are powerful agents in the production of plague. This fact is evident from the prevalence of this epidemic in those countries where the severest poverty has been known to exist. Thus Egypt, India, and some parts of Russia, have been, from time to time, the favorite abodes of the plague. Now, it is a notorious truth that in these same countries the condition of the poor is most wretched indeed. Not only is there an absence of all nutritious food, but their surroundings are filthy and unhealthful beyond description. These things, in connection with their personal habits, never bathing from one year to another, and living with an utter disregard for the simplest and most fundamental laws of hygiene, render them peculiarly susceptible to this disease. This connection between poverty and the plague is more than accidental. It has been noted, and commented upon by many of the oldest observers of this mysterious malady.

It has appeared with such persistency in those countries, which, like some parts of Asiatic Turkey, press severely upon their peasantry, that we can no longer doubt that there is the relation of cause and effect between the poverty found among the oppressed people and the outbreak of the pestilence among them.

It has also been noted that, in the countries mentioned, numerous famines have occurred from time to time. In many instances these long-continued famines—which are but the concentration of years, it may be of ages, of poverty—have been immediately followed by a violent outbreak of the plague.

In this very fact we find an answer to the question, why should the plague be so severe in its ravages, and so frequent in its appearance, during the earlier centuries and the Middle Ages, while in our times it is almost extinct?

On account of the frequent wars, draining the countries of all able-bodied men, the soil often went without sufficient cultivation, in the past, to provide against a year of drought, which led to the failure of even the scanty supply which each year had been accustomed to produce. Famine would inevitably result.

This condition of affairs has long ceased to exist, at least to any extent in civilized countries. Famines rarely occur.

It is significant that the plague has simultaneously disappeared from civilized communities, and is remanded to those countries where famines still occur, chiefly, however from some error in the method of government, or a failure to appreciate the true laws of political economy. But too much importance must not be ascribed to famines in the production of the plague. The other, and more usual results of poverty, have had quite as much to do with the appearance of the scourge. Indeed, famine, without the filth, bad drainage, and general disregard for personal hygiene, met with in the midst of extreme poverty, could not produce the pestilence. Its disappearance to-day from civilized communities is due not only to the disappearance of famine, but also to the gradual though wonderful improvements in all the surroundings of the social life. When we consider the vast improvement of the present age over medieval and ancient times, in the cleanliness of our surroundings, in the marked preference for the bath which is shown in our times, in our excellent systems of house, town, and city drainage, we understand at once why the plague has disappeared. In referring to the condition of European and Asiatic cities during the Middle Ages, we wonder that there

was not even more of disease than really existed.

They practiced no drainage system whatever, and their cities were inconceivably filthy. In personal hygiene they were no farther advanced. They rarely ever bathed. Instead of using water and soap to remove the accumulations upon the skin of their persons, they resorted to the use of perfumes to conceal the odors of uncleanliness. They believed in deodorants rather than in disinfectants. We have reversed the practice, and use disinfectants to destroy filth, instead of deodorants to conceal it. What has been said about the uncleanliness of the cities of the past will be readily appreciated by any one traveling in the Orient to-day. The cities of the East have not made corresponding progress. They are still where the cities of Europe were several centuries ago. The people of the greater part of Asia live in the midst of surroundings which to us seem full of disease and death; no drainage, no scavengers other than what nature has supplied, and a blind confidence is exhibited in the bright sun alone, which is the only thing that does protect them from the effects of their loathsome environments. If such a condition of things exist in the glorious light of the nineteenth century, the supposed culmination of every effort at human progress, the supposed realization of the utmost dreams of the sanitary philanthropist, what must have been the actual condition of things in the twelfth century?

It is thus clear, that an understanding of the conditions of life in the past, which served to bring about outbreaks of the plague, must serve to emphasize the view already expressed with reference to the causative relation which poverty bears to the appearance of pestilential disorders.

Again we may mention war as a cause, and an important one too, in the production of bubonic plague.

Some of the worst epidemics in history, have appeared after a series of sanguinary battles, which have left thousands of unburied corpses upon the field of conflict. These unburied victims, decomposing in the sun, tainted the air for leagues around, and a pestilential septicemia was the inevitable result.

The very fact that the plague is characterized by discharging buboes, indicating some morbific poison working the blood, proves conclusively that this tainted air was an important factor in the production of pestilential outbreaks. These discharging buboes led to the designation "bubonic plague."

Just as an unfortunate wound in the dissection room, or in the performance of a post-mortem, entails upon the victim all the horrors of blood-poisoning with its pyemic and septicemic manifestations, so in the case of those exposed to the influence of an atmosphere tainted by thousands of decaying bodies, there would naturally result a similar poisoning of the blood, manifesting itself, however, in far more disastrous ways.

But notwithstanding the fact that these influences mentioned so evidently bear an important causative relation to the plague, yet it must be admitted that they are not the only causes.

There is something mysterious and incomprehensible in the whole question of its causation, and there remains yet much for the skill and science of future generations to unravel.

But if the causation of this fearful malady is so obscure, the second division, or the abnormal appearances of the bodies of its victims, presents us with even more negative results. But we will consider for a moment this aspect of the question, and see what different observers have said concerning the

Second—Pathology or Abnormal Changes Produced in the Body of the Victim Seized With the Plague.

Post-mortem examinations have shown a general resemblance to death from typhus fever. But unlike typhus, in this disorder there is a marked affection of lymphatic glands, which is entirely absent in the victims of typhus. Also, the lungs, brain, and right side of the heart have been almost always found distended with blood. The blood itself manifests the peculiarity of a rapid decomposition, pointing to the presence of some definite blood-poisoning, as is seen, for example, in the blood of persons dying from anthrax or malignant pustule. The blood is also very dark in color. The spleen and liver show a marked hypertrophy, and this enlargement of these organs again illustrates what was said with reference to the presence of some very active poison in the blood. One of the most peculiar apperances in this disease, is the presence of numerous petechiæ, or patches of dark blood, over the surface of the body, caused by the extravation of blood beneath the skin. The extent of such blood-patches varied in different epidemics of the plague, but they seem to have always been present to some extent, no matter how mild the outbreak. When the plague received the name of the "black death," this formidable appearance was more marked, perhaps than ever before. It is certain, however, that it

was to the presence of these petechiæ that this designation owed its introduction into common use. I should add, that this extravasation of blood beneath the skin only appeared in those cases in each epidemic in which the attack assumed a fatal form. But this will be referred to again under the of symptoms, to which division we will at once pass along.

Third—The Symptoms of the Plague.

Fortunately for one interested in this subject, there is no lack of evidence, or rather of descriptions, of the symptoms of this fearful disorder. Each inquiry in this direction, meets with abundant answers. The symptom, as described by the oldest observers of the earliest authenticated visitations of the plague, are found to be identical with those most recently described.

Indeed, it is this striking coincidence in description, which warrants us in regarding the pestilential outbreaks in history as a continued succession of the same fatal malady. Writers upon this subject have divided the plague into pestis minor and pestis major, this classification being based upon the violence in the symptoms, rather than upon any radical difference in the real nature of the disease. In the minor form of the plague pestilential buboes are noted, giving rise to the term bubonic plague. since the buboes are initial, and therefore characteristic, symptoms. Marked swellings early appeared in the groin, arm-pit, and various other glands throughout the lymphatic system. Little or no fever was present in this milder variety, and the general or constitutional disturbance was very slightly marked.

But in the graver form, or pestis major, in addition to the symptoms already mentioned, more formidbale ones were always observed. Thus, the invasion of the disease would be very violent and sudden, and usually ushered in by a severe chill, accompanied with frightful pains in the back and in the upper and lower extremities. These introductory symptoms were soon followed by a profound nervous prostration which oftentimes amounted to absolute coma. But if this tendency to unconsciousness was absent, the nervous disturbances assumed the form of an uncontrollable anxiety. The victim's mind would dwell upon the darkest fancies, picturing to itself the most hideous illusions.

These fantastic visions might be either grotesque or horrible but in the latter case reason was often hurled from her throne by the awful nightmares of thought with which the loathsome pest weighed down the brain of the stricken man.

Great bodily restlessness was frequently observed, together with dizziness, great thirst, extreme headache, and a deep-seated pain in the region of the stomach. The eyeballs were swollen, the conjunctiva fiery red, while the tongue was greatly enlarged, dry and black, although some report having seen cases in which it became very white instead. A short time before death occurred the collection of blood-patches beneath the skin, above referred to, would take place. The appearance of this symptom was always regarded as a sign of a speedy and unavoidable death.

Again, hemorrhages often took place from the lungs, and this also was looked upon as a very dangerous sign.

As to the length of the course which the plague usually ran, it depended upon the form, as whether it was pestis minor or major. In the minor form the disease ran its course in from ten to sixty days, and recovery almost always took place. But in the major variety, the course varied from a few hours to thirty days. It was usually fatal, however, on the fourth day. But if the patient survived the sixth day, there was then entertained every hope of his recovery.

Such, in brief, is the description of the general characteristics of this awful malady. If one truth stands out clearer than all the rest, it is that the plague must be regarded as a distinct, unique disease, one too, in the presence of which the most gifted and brilliant physicians of the ages have stood awed and trembling, as in the presence of a mysterious scourge sent by an avenging God to chastise the nations of the earth.

Its occult nature has never yet been fathomed, and we still view it with an indescribable fear, such fear as no other of the dread visitants of humanity can excite. We can rightly boast of specifics, in the treatment of some disorders, or at least of an ability to master their difficulties, but we have nothing in the whole range of our medical resources, by means of which we can successfully meet and crush this powerful enemy of man.

This brings us to the fourth and last division of this subject, which is—

Fourth—The Treatment and Possible Prevention of the Plague

The most that can be done, and all that ever has been done, in the way of treatment, is the use of remedies to alleviate the symptoms as they appear. It is impossible to treat it in a rational manner, since we do not understand the source of the disorder. Temporary relief may be afforded from some of the more violent suffering, but the disease runs its course entirely un-

checked by anything we can do. It is thus evident that nothing can be said about any scientific treatment. Of course the physicians of the past instituted different lines of treatment, depending upon the individual judgment of the medical attendant, when there was one. But in this they merely followed, as above pointed out, the suggestions which special symptoms indicated.

Farther than this they did not and could not go. In fact, this disease has been chosen, in great part, because of its being a perfect illustration of helplessness in the presence of a malady which has ever baffled the loftiest human skill. It certainly teaches humility in the presence of a power whose strength can only be measured by a just appreciation of that might which is enthroned in the heavens, exhibiting itself to a wondering world through frequent visitations of wrath, in chastisement of the frailties of man. But there is hope in the midst of our very helplesness. Our inability to cope with such a disease forces us to take refuge in what is called preventive medicine. If we cannot cure a given malady, it may be possible, at least, to prevent its ravages, by improving the conditions of human society. Is it possible to prevent the outbreak of the plague?

This question has been asked for more than a century, and it has already received a definite answer in the affirmative. When we contemplate the frightful ravages of this scourge of the nations, we are compelled to admit that in the crushing out of the plague from civilized communities, the grandest triumph of the century has been achieved. When I say the grandest, I include all the possibilities, with regard to all other deadly epidemics, which such a victory opens up before the medical profession.

The plague has so far been conquered by the gradual improvement of the sanitary condition of the countries of Europe.

The last lingering germs seems to have been finally destroyed in England by the great London fire, and in Constantinople, as late as the beginning of the present century, by the providential conflagration which so nearly destroyed the whole capital of the Moslem world. The efforts of the century have been along the lines of purifying the lives and homes of men. Take this work, in connection with the efforts towards a more perfect town and city sanitation, and the key is given to the puzzle of doing away with not only the plague, but also, in time, with the other dangerous foes to human life. If the plague, so deadly, so malignant, so rapidly fatal, has been conquered, what can we not expect with reference to the other epidemics which afflict modern life? No victory, now, can be great enough to occasion even surprise, for the victory already gained transcends even the possibilities of the future.

A Government Duty.

By James Kilbourne, M. D., St. Francisville, La.

After all the light that has been thrown upon the cause and danger to the public health from tuberculosis by modern scientific research, and after a practical endorsement of the conclusion reached by such an eminently authoritative body as the late Congress of Tuberculosis, assembled in London, the time is certainly opportune for some practical consideration looking toward its suppression or entire eradication.

So long as the older view of its causation was generally accepted and it was looked upon as the natural result of inheritance, it was not surprising that its treatment was left entirely to the personal efforts of the family physician, and it was accepted as one of the ills of life to be borne with what patience was possible. But science has changed this view—it has demonstrated that consumption is an acquired disease, contracted from others having it, in a definite and positive manner. It has further pointed out the steps necessary for its complete eradication. These steps are easily understood, but the practical carrying of them out is a gigantic undertaking, so much so that it is very doubtful if any great good can come from individual effort.

Every city and every town, every village and every hamlet, all over the entire land, contains its many points of infection from which this deadly contagion is being spread, and from the fact of the constant changing from one locality to another by such a large portion of the people, even the united efforts of local communities must prove unequal to the task of eradicating the disease. Only the strong arm of the entire Nation, as represented in the government, can achieve success in a fight against this, the most dangerous foe of our modern civilization.

The question may be asked, would the government of a State, or of the Nation, be justified in taking upon itself this responsibility? Surely the precedent has already been established, in the State control of insanity, of outbreaks of yellow fever, etc., and in the establishing of the Marine Hospital service by the general government. Why should some diseases be so persistant-

ly fought, or cared for, and others equally, if not more deserving of attention, be ignored by the government?

Tuberculosis stands at the head of the diseases causing suffering and death in the United States.

Silently, but continuously, it is seeking out its victims from every walk in life, and from every locality in this broad land of ours, cries and lamentations are going up day by day, for the victims snatched from loving arms to untimely and cruel death by this merciless executioner, and still no effort is made by those in authority to protect the people. Our law-makers are selected, supposedly on account of their representative ability, and high mental standing in each community; consequently they ought to be most easily impressed with the seriousness of the condition confronting the country from every source. They are alive to most dangers; they spend money like water when their country is threatened with war. A threatened invasion of yellow fever, smallpox, or other epidemic disease, causes them with commendable promptness to vote men and money to meet the danger. Then why is it that there is such apathy shown towards the continuance of a disease that is yearly killing so many people, and is yet so amenable to a systematic and determined effort toward its suppression?

The only answer to these questions lies in the belief that the true status of tuberculosis as a preventable disease has not impressed itself upon us as a people. If we could realize that the disease is a most serious menace to the health and welfare of the community; that it is a scourge that will increase as the population grows more dense; that it can be more economically dealt with now than later; that it can be entirely eradicated, and that from an economic as well as a humanitarian point of view it is the most serious health problem presenting itself to the world to-day—I do not believe that it would be long before every force of wealth and intellect of this mighty nation would be enlisted against its longer continuance in our midst.

And it is to the medical profession that the eyes of the hundreds and thousands of consumptives of the country must turn for relief. It must be held morally responsible for the continued existence of the evil if all its members do not exert their power toward the education of the people generally as to the necessity of this warfare. The physicians have been slow in taking up the matter, and it is surely time they should realize their responsibility. Every Medical Journal and every Medical Society should take up the work, first of educating the profession, and then of educating the public as to the dangers and the possibilities in connection with the disease under consideration.

Only by continual agitation will the education needed be brought about, and only when made to realize the danger ahead will the machinery of the government be put in motion for the suppression of this awful scourge of civilization. That there may be a general awakening along this line both in and out of the ranks of the profession, is most earnestly to be desired.

Some Obscure Injuries following the Toxic Use of Alcohol.*

By T. D. Crothers, M.D., Superintendent Walnut Lodge Hospital, Hartford, Connecticut.

There are many serious organic diseases which are traceable to syphilitic infections, also to heat and sun-strokes, and also to brain shocks, concussions or injuries from falls and blows on the head.

Sometimes the connection between these causes and the serious diseases which follow is very clear and can be traced in a continuous line of symptoms. In other cases it is obscure, with breaks in the history, and yet these causes as the starting point of many grave diseases which follow cannot be mistaken.

Alcoholic intoxication is the first cause of many equally serious diseases and neuropsychoses, although this fact is largely unknown and unrecognized by the profession.

The familiarity with intoxication, and the delusive theories of moral causation have repelled most efforts to study the pathology of this form of poisoning; hence the etiology of delirious delusional alcoholics on the streets and in the station houses are literally more obscure and unknown than the etiology of yellow fever or the plague.

In this new study of the subject I will confine myself to the conditions which are traceable to the first toxic action of alcohol.

This may be divided into two classes.

First. The direct injuries which follow from alcoholic poisoning.

Second. The psychoses following this state manifest in the alconolic craze and inebriety which follows.

As an example of the first form of injury, the following instance is an illustration:

Many years ago I was called to see a physician whose intoxication was so profound

*Read at the Mississippi Valley Medical Association, Put in Bay, Sept. 13, 1901.

as to be alarming. He had attended a supper at a medical society with some friends, and drank several kinds of wine. This was his first intoxication. He had been a total abstainer up to this time, and both the taste and smell of spirits were particularly unpleasant. All his habits of life and living had been regular. He was considered a strong, healthy man, and had never been ill. He recovered the next day and went home. The only change observed was extreme paleness.

Several years later he consulted me, and gave the following history:

After this first intoxication, he became anæmic; had attacks of nervous dyspepsia; could not eat certain foods. Any overexertion or break in the regularity of his habits of sleeping or eating was followed by extreme exhaustion. Attacks of insomnia and headache followed, and his ordinary practice was a burden, only done with great mental effort.

He was filled with morbid fears of fatal mistakes, and loss of reputation. He had been abroad six months, and returned no better. All the physicians he had consulted had diagnosed neurasthenia with possible incipient dementia; and advised change and rest. He was morbidly introspective, and was alarmed at the possibility of oncoming malignant disease of the stomach. He had grown thin and was anæmic, and though at times he slept and ate well, yet indigestion and insomnia would follow. Various functional disorders frightened him so seriously that he would go to bed for days at a time, then get up and appear well again, and attend to business with pleasant ease. Later he was obliged to give up surgery for fear of making mistakes, and seemed to have at times doubts of the correctness of his judgment, and gave unusual care and attention to confirm his opinions. This neuro-psychopathic state continued for two years, ending in sudden death from what was called angina pectoris. He asserted that his condition dated from the injury following the first intoxication.

The second example was also a physician of forty years of age, temperate, and in vigorous health. He had never been sick, and had taken unusual care of himself. His ancestors were healthy, long-lived people, and there were no hereditary diseases in the family. He passed a rigid examination for a large life insurance a week before he was first intoxicated. Previously he had never used spirits or tobacco, both from principle and from disgust with the odor and taste of these drugs.

He attended a banquet in a neighboring city, and to the surprise of his friends, when urged, drank freely of wine and champaigne He returned to his home in a semi-delirious state, and later became stupid and remained in bed for three days. Then he recovered, and went about his usual work. From this time his manner changed. His former cheerfulness merged into silence and reserve. He seldom laughed, and seemed absorbed in some mental study. He complained of insomnia, and seemed very anxious about foods and baths for himself. Six months later he was anæmic, and walked as if partially palsied. His sleep and digestion were impaired. He made no complaint; went about as usual, and when asked to explain his condition, treated it lightly as some obscure nerve exhaustion. The next year hypersensitive states appeared. He complained of cold and sudden heat, and began to express fears of sudden death, and thought the condition malarious; took large quantities of quinine and antimalarial drugs. His mental condition changed. He was suspicious and irritable, and talked loudly at times, and at other times would be reserved and seemed afraid to speak.

He consulted a number of physicians, who diagnosed brain exhaustion, and advised change and rest. He spent a year travelling, and came back worse; and a year later died suddenly of some sudden palsy. A postmortem revealed nothing that would explain the cause of death.

The third example was that of a clergyman, thirty years of age, in charge of a large church. He was a strong, athletic man, temperate, and had never used spirits or tobacco. There was no history of hereditary disease in his family, and he had never been sick. He was chilled during services at a funeral in a country cemetery, and given a large glass of cider brandy for warmth. This diminished the muscular power of his legs so that he spent the night at a friend's house. For other symptoms, hot whiskey was given, and he was considered ill for two days before he could return home. From this time he became a nervous invalid. First, nutrition was disturbed; food disagreed with him. Then insomnia and heart palpitation followed. Influenza, malaria and various forms of neurasthenia were diagnosed. Rheumatism and stiffness of the joints succeeded. Then his mind became feeble, and emotional changes followed, until two years later he resigned his charge, and is now an invalid, unable to walk or bear any strain of mind or body.

The fourth example was that of a mechanic, forty-six years of age. He was a perfectly temperate man, never using spirits

or tobacco, and living in good surroundings, and was regular in work, eating, and sleeping.

After a fortunate sale of a patent in a distant city, he was persuaded to drink with some friends, and suddenly became intoxicated. He remained in bed twenty-four hours; then returned home, and called the family physician, and was supposed to have an acute attack of indigestion. From this time he was an invalid, and appeared to be suffering from some obscure neurosis, with swellings of the joints, and general nervous exhaustion. Five years later he gave up business, and is now going the rounds of sanitariums for relief from paroxysmal pain and nameless functional and organic disorders.

These examples are given as marked types of neuro-psychoses and psychopathies which are traceable, and began with the first profound intoxication from spirits.

In those instances an aversion to all use of spirits followed the first intoxication. No spirits were taken before this event, and there was a general impression that intoxication was the first cause of the disorders which followed. There was no hereditary history in these cases, and all the facts pointed to the first poison of alcohol as the active and exciting cause.

In two similar instances occurring recently, where an accidental intoxication was the starting point of serious and finally fatal neurosis marked by sclerosis and palsies, there was a history of previous hereditary psychopathies. It was evident that intoxication acted as exciting cause, rousing up a latent tendency to disease which continued to a fatal termination.

The second clinical phase of this subject is the psychosis following the first intoxication, breaking out later in some form of inebriety which is literally a symptom of the previous degeneration of injury.

I have found a number of less prominent examples where neuroses appeared soon after the first toxic poisoning from alcohol that was supposed to be due to influenza. Thus, soon after the first intoxication symptoms of influenza came on, and a long distressing sequelæ of obscure diseases followed, ending fatally.

Malaria, rheumatism, and other symptoms of disease seemed to start from this point although ascribed to other and insignificant causes.

The evidence that alcoholic poisoning was the specific cause was due to the fact that symptoms of functional and organic changes began soon after the intoxication, and also that there were no facts in the previous history which indicated these changes.

I have seen four cases of persons who used wine and beer in great moderation during periods of from two to six years; then, suddenly, they became profoundly intoxicated; recovered; and were total abstainers ever after.

Dating from a first acute alcoholic poisoning, various and most complex neuroses appeared, and diseases which were obscure and very difficult to diagnose and to treat followed, ending fatally in a short time. The specific cause, alcoholic poisoning, was not recognized nor the preliminary period of moderate drinking considered as a predisposing factor in the cases.

In my studies of a large number of both alcohol, opium, and other inebriates, a certain proportion of instances have a history of one early, profound intoxication, and then after years of abstinence they merged into a continuous addiction to spirits or some narcotic drugs. An interval of years may have passed from the time of the first intoxication, during which they were total abstainers, and, in some instances, promoters of the cause of temperance. Then, suddenly, without apparent cause they became addicted to the use of spirits and drugs.

The mental symptoms in such instances are often so prominent as to suggest a long preliminary state of degenerative changes dating from the first intoxication.

The remark of friends and near associates that such persons were always queer and peculiar in their thoughts and habits is a confirmation of the expectation that neurotic changes had been going on long before the break-down.

The following is an example under my care. A young man of good health and family history became profoundly intoxicated on his graduation from a law school. For ten years he was a hard-working, temperate man, and although successful, was eccentric. He would suddenly stop business, go to bed, and abstain from food for two or more days, claiming to be exhausted, and threatened with congestion of the brain. The family physician considered it largely hysteria and could find no tangible cause. Both in his business, and in regard to himself, he was erratic and changeable in his plans, and spent much time reading books of health. Suddenly he began to use spirits daily, and soon became an inebriate. There was doubtless a connection between the first intoxication and the inebriety years after. This was evident in the neurotic symptoms and changes during this period.

Persons who become neurotics in the best

conditions and surroundings of life, and then unexpectedly drink or take drugs to great excess, are often found to have a history of some early profound intoxication with slow recovery. These instances are unrecognized, but can be traced in many cases, and the connection between the first intoxication and the later stages can be established without much doubt.

A leading business man became intoxicated at a wedding for the first time in his life, never having used spirits before. He was sick for a week; then recovered. From this time he was conscious of increased nervousness, loss of power of attention, was fearful and worried about matters which previously gave him no concern. He described his symptoms by the phrase that "he had lost his nerve" and could not control himself as in former times. He complained of weakness and disinclination to either think or act, and said it all dated from the intoxication at the wedding. This increased until a year later hemiplegia appeared. Two years afterward he died of some acute disease. The interval between the first toxic poisoning was marked by distinct symptoms of both mental and physical changes and fatal break-down which have not received any study so far.

Many persons become intoxicated at long, irregular intervals, depending on some unknown causes, and while there are no pronounced symptoms of neuro-psychical disease which attract attention, there are often symptoms of debility and weakness which are overlooked. Such persons suffer from organic and functional disorders and acute diseases that are ascribed to other causes. Neuritis and obscure forms of so-called rheumatisms, are common. An instance occurring recently of a physician who was seized with what was called an attack of rheumatism, and after a few hours of acute pain, died. It appeared that for the past five years he had been intoxicated at least six times, and on each occasion suffered from severe pains in the legs and severe heart depression. The last intoxication was four days before death, and he was out as usual attending to business the day after drinking. No doubt there was some connection between the alcoholic poisoning and the death which was not recognized.

It may be stated as a fact that every intoxication from alcohol is both a physical and psychical concussion to the brain centers, and the beginning of both organic and functional changes which may go on rapidly or slowly. Frequent intoxication develop imbecility and masked dementias. This is seen from any careful study of chronic inebriates. The resisting power of the brain to continue intoxication varies widely, yet it is evident that after certain changes have taken place the action of spirits may seem less acute, and prominent, but the degeneration is continuous. Like repeated blows on the head, the effects are cumulative and finally merge into well-marked organic neurosis.

The phenomeua of intoxication from alcohol are familiar, and yet their physiological and pathological significance is largely unknown. An outline view will be of interest. The first glass of spirits produces a sudden flushing or blanching of the vaso-motor circulation of the blood to the face. The facial muscles are first agitated; then becomes fixed and have a stolid, palsied appearance. Or they may twitch and quiver for a time, then settle down into a stolid, fixed state. The lips seem more firmly compressed, and when used rapidly, have a spasmodic movement. The eye appears bright and glittering; then becomes suffused with tears, and rolls about in an unusual way or settles into a fixed, palsied look. The voice is altered. Words come hurriedly or slowly, or very smoothly glide into each other, both with or without an effort. Respiration is quickened, and a sense of quivering and agitation pervades the body. Brain activity is suddenly increased, rapidly merging into confusional states, with difficulty of utterance. When more sprits are taken all these symptoms deepen. The first shock from a sudden interruption of the normal rhythmical flow of nerve energy passes away and a delusional period follows. This is anaesthesia, with buoyancy, comfort and rest. The first action is that of shock, and profound alteration of the functional activities of the brain Later the special senses become impaired. Sight is diminished. Hearing is dulled. Feeling, taste and smell is lowered. There is a fall in temperature. Muscular power is enfeebled. Memory is weakened. Rapidlty of thought and power of concentration, with conception and perception and judgement, are all more or less paralyzed. Stupor and unconsciousness follow. Before this later stage a period of exaltation and delusional confidence in ability to think and act more wisely and clearly is always felt.

There is in all forms of intoxication, first a shock and concussion to the brain and nerve centers. Second, a period of anaesthesia of the higher and sense centers, with delusional exaltations and boldness of mind. Third, these all finally merge into stupor, palsy, and unconsciousness.

The so-called stimulation is irritation and paralysis.

Psychological measurements of the brain and sense functions as well as the organic functions at their early period shows palsy. Yet the theory of stimulation is accepted as a true explanation. Each intoxication is a profound sudden paralysis of the brain and nerve function.

A concussion from chemical agents acting in some unknown way raising the heart's action, then lowering it acts with especial severity on the higher brain centers.

The feeling of comfort, exaltation and superior vigor are delusions. The theory that the action of spirits will give new power and force in an emergency is an error. It brings recklessness and loss of judgement with failure of the finer conceptions of things, but nothing more.

When alcohol is used to the state of intoxication it is always followed by symptoms which show in some degree the injury which has been done. The common sequelae of intoxication are headache, and exaggerated sensations of head and stomach, with extreme debility; these are significant signs of injury. The acuteness of these symptoms calls for more spirits, and finally the suffering subsides because the higher sense centers are blunted and anaesthetized and fail to register the pain impressions.

From our present knowledge of the action of alcohol on the brain and nervous centers, we are sure that recovery from its toxic effects is slow, and in some cases, almost impossible. The damge may be covered up and not be clear except from a minute study of the symptoms and yet it exists.

Intoxication soon after or near the period of puberty has been the starting point of very serious neuroses which continued years after, often breaking out in some neurosis or form of inebriety.

Profound intoxication at from forty-five to fifty is very serious in the entailments which not unfrequently follow from it.

Some of the facts which I wish to make prominent are these:

First. Intoxication from alcohol to the extent of coma with profound relaxation of all functional activities of the body, is often a serious injury to the brain and nerve centers, and is followed by neuroses and organic change.

Second. The significance of alcoholic intoxication in the study of obscure diseases cannot be overstated. It may be both an active and an exciting cause and should always be considered in neuro-psychopathies or other disorders that follow.

Third. Intoxication at puberty and in middle life is often the starting point of a circle of disease which is usually ascribed to other causes.

Fourth. Intoxication always predisposes to the diseases of inebriety from alcohol or opium which may come on suddenly or at any time in after life.

Fifth. Poisoning from alcohol is far more serious than supposed, both in its effects and the neuroses which follow.

A Child One and a Half Years Old with a Shingle (4 Penny) Nail in Its Wind-Pipe--Some Other Cases of Foreign Bodies in the Trachea and Oseophagus Reported.

By Dr. William Lewis Bullard, of Columbus, Ga., Member of the American Medical Association, The Georgia Medical Association, the Tri-State Medical Association of Georgia, Alabama and Tennessee, President of the Columbus Board of Health, Vice-President of the American Congress of Tuberculosis.

In the February number of The Alabama Medical and Surgical Age, 1893, may be fonnd "Cockleburr In The Air Passage of a Child Successfully Removed by an Intra-Laryngeal Operation by W. L. Bullard, M.D., Columbus, Ga." Part of that report is "That I would be able to deviate from the general rule, that is to say, remove the corpus alienum by an intra-laryngeal operation instead of trachectomy as advised by most text-books on surgery and practiced by the most eminent surgeons. I hastened to cocainize the pharynx and larynx with a solution of cocain, and with the co-operation of the little patient, it was not long before I had the burr safely in the grasp of a Steerk's tube forceps and readily extracted it to the admiration of Dr. Sapp and indescribable relief to the patient and the father of the child. With some advice as to treatment should the laryngeal inflammation not soon heal or subside the little hero was put on the first train and carried to his home instead of having to remain, in the city for a week perhaps, had I performed either laryngotomy or tracheotomy. Hamilton (1) says "In short we have very few resources in this unfortunate class of accidents except a surgical operation. If the object for which we are to search is lodged in the ventricles of the larynx the operation of laryngotomy is to be performed." Agnew (2) advises in that classical work of his on Surgery that "When it can be determined that the body is located in one of the ventricles of the larynx laryngotomy is to be preferred." The Atlanta Society of Medicine reporis (3) the following: "Dr.

——— reported two cases of tracheotomy for foreign bodies. One a girl, eight years old, swallowed a knitting-needle bent in the shape of a hairpin. Cut down and found it without much difficulty. The second swallowed a cockleburr four days previously; performed tracheotomy; could not find the foreign body; cut two more rings of the trachea, kept wound open and the cockleburr came out four days after the operation.

I mention the above only as evidence to show that the tendency is to remove foreign bodies from the air passages by an external operation as tracheotomy laryngotomy, ignoring intra-laryngeal efforts, which according to my mind and experience (if the patient is in no immediate danger) should always be more diligently practiced as the most preferable method, and if found impracticable, then resort to one of the external operations." It is nearly ten years since the above was written, and yet I am willing to repeat it as good advice, for I occasionally see reported cases of foreign bodies in the trachea, operated upon without even making a laryngoscopical examination, notwithstanding the advancement in laryngological surgery, so ably advanced by numerous laryngologists.

Since reporting the above case I have frequently been consulted regarding foreign bodies in the throat. The last one about one week ago. A child about one and a half years old, of Butler, Ga., referred to me by Dr. Edwards, and was brought by its mother and father, both of whom were very much alarmed, asserting that the child had a nail in its throat. When I inquired if they knew positively that it was a nail, they answered "no," but said that the child's sister, who, at the time, was nursing the child, said it was a nail. Two physicians had seen the case (one an eye, ear and nose specialist) both diagnosing a foreign body in the trachea, and advised that the case be brought to me. I learned that the accident happened five days previously. At times it would have paroxyisms of the most violent coughing which would last for several minutes, then a stage of quiescence, lasting for an hour or more. The cough was croupy, indicative of laryngitis and bronchitis. After a thorough cocainizing, together with adroneline spray to the pharynx and larynx, a laryngoscopic examination revealed an unobstructed larynx and glottis, which convinced us that tracheotomy was the only resource for relief. This we tendered to the child's parents, who, after another day of suspense, asked to have the operation performed. The patient was soon chloroformed by Dr. Gill, of this city, and with the help of Mr. Amory Dexter, a three year student at the "Jeff" I did the low operation and without difficulty removed a shingle (4 penny) nail, a cut of which is here shown. The trachea, muscle and integument were sutured separately, and the wound readily healed, and in six days patient returned home fully recovered.

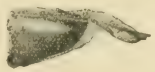
F. B., child two years old brought to me by its mother, accompanied by Dr. Rodges, the family physician, of Reynolds, Georgia, with a watermellon seed in the wind-pipe. A laryngoscopic examination assured us that the foreign substance was below the glottis, besides we could hear the up and down movement of the seed in the trachea during inspiration and expiration. Tracheotomy was advised and readily consented to. Patient was soon chloroformed by Dr. Rodges, and with the competent assistance of Dr. George J. Grimes, of this city, I without difficulty opened the trachea and almost instantly on expiration the seed was expelled, striking the ceiling of my office. Wound was dressed in the usual way and soon healed, patient returning six days after the operation.

S. C., age eight years old, a bright little girl, was brought to me some months ago for having swallowed a pin. The accident had just happened a few hours before. I cocainized the pharynx and larynx and with the laryngoscope readily located the pin firmly transfixed horizontally in the ventricles of the larynx. Forceps were introduced intra-laryngeally, the pin grasped in the middle and with some difficulty was extracted, having been bent almost double on account of the force required to dislodge it. The ends of the pin cut either side of the larynx during the extraction, but this soon subsided and in a few days the voice regained its normal resonance and patient dismissed as well.

Two years ago I was consulted by a lady who claimed to have something in her throat. Said that her husband was sick with slow fever, and that she had made him some chicken soup, and in tasting it to find out when suitable for the fever-stricken patient, something lodged in her throat. The family physician examined the throat macroscopically, could see nothing, and advised that in a day or so the irritation would have passed away. This prognosis did not materialize, so in three or four days I saw her.

From her description, I thought the trouble to be in the osophagus. The use of the laryngoscope revealed nothing foreign in the pharynx or larynx. I then introduced into the stomach a bristle probang, with the hope that I might dislodge the disturbing element, either going or coming, so to speak, and sure enough, on withdrawing the instrument, attached thereto was a piece of bone one and a half inches long. Patient was grealy delightled and also somewhat embarrassed. I suggested that posibly it was best that she *only* "tasted" the soup. The irritation from the piece of splintered bone together with its extraction caused no little osophitis, with painful deglutition and dysphagia of several days duration. The whole neck was considerably swollen. After a few days, however, with simple treatment, she fully recovered.

Another case, Mr. W. B., age 60, come to me at night, saying that he had something "sticking in his throat," adding "that he had gone into a restaurant, took a drink, after which, a mouthful of chicken salad and necessarily the spicula of bone, or whatever it might be, must be very small." An examination of the pharynx and larynx revealed nothing foreign, so I introduced a probang into the osophagus, thinking posibly I might dislodge the obstructing body, which could be felt during the passage of the instrument about midway between the pharynx and stomach. On the withdrawal of the instrumont, the foreign body was brought nearer towards the pharynx. The instrument was again introduced and on its withdrawal a large piece of the breastbone of a chicken was removed, a cut of which is here shown.



The patient was very much excited and appeared to be in great distress. Its removal gave complete relief, and the next morning he was at his usual place of business, showing no symptom of his trouble the night before.

I have several other cases but they are similar to the above and to repeat them would be more of a reiteration, then also, the motive which prompt this report is to show, while frequently the major operations are required for the removal of foreign bodies from the windpipe and gullet, yet not infrequently, the same may be accomplished by intra-laryngeal and intra-osophageal methods if the obstruction is in the glottis or gullet, which, however, in unreasonable children, I'll admit, are more delicate and require more *knack* and *tact* to successfully perform than ether tracheotomy or osophagotomy, nevertheless it will oftentimes be more satisfactory and safer for the patient.

October 1st, 1901 :—

1. Principles and Practice of Surgery, 1892.
2. Principles and Practice of Surgery, 1893.
3. Atlanta Medical and Surgical Journal, April, 1892.

"The Practical Management of Small-pox."

By M. K. Allen, M.D., Louisville, Ky.

Directly after the return of the soldiers from the Cuban war to the United States, there commenced one of the most wide-spread epidemics of small pox this country has ever experienced. This epidemic has entailed a cost to the people of this country, millions of dollars in the way of vaccination, issolation and the caring for those afflicted with the disease, and millions of dollars in the loss sustained to business, not to speak of the loss in life.

The disease has prevailed in a mild form and the death rate has been low. Many counties in this state have had to contend with the disease, and aside from loss of life, the direct pecuniary loss has been over a quarter of a million dollars, to say nothing of the business loss and embarrassment.

It has therefore occurred to me that it might not be uninteresting to at least some members of this Society, to give a short, concise statement of the methods which have been employed by the health department of this city, during the past two or three years, in the management of small-pox.

At the suggestion of the health officer, an ordinance was adopted and became effective February 6th, 1899, Sec. 11 of which reads :—

"It shall be the duty of all inhabitants of the city of Louisville, who have not been vaccinated, or, if vaccinated, not successfully, to procure their own vaccination, or revaccination as the case may be, within ten days from the passage of this ordinance; and all persons who shall fail, or refuse, to comply with this section of the ordinance within the time prescribed herein, or shall fail, or refuse, on demand of the health officer, to submit to vaccination by him, or by the physician of the Eastern or Western

districts, or some other reputable physician of the city of Louisville, shall be fined in any sum, not less than five dollars, nor more than fifty dollars for each offense."

Sec. 12, of the same ordinance reads: "No principal of any school, and no principal or teacher of any private, sectarian, parochial, or other school, shall admit to any school any child or minor who shall not have been properly vaccinated. The evidence of such vaccination shall be a certificate signed by the health officer or any practicing physician."

Sec. 18, same ordinance reads: "The health officer is hereby empowered to visit any and all public, private, and parochial schools in the city, and to make or cause to be made an examination of the children and minors in attendance therein as often as may be deemed necessary to secure compliance with the provisions of this ordinance."

It will thus be seen that the health officer of this city is clothed with full authority to compel vaccination, and this discretionary power is exercised without fear or favor. I am glad to be able to say that, meanwhile the more intelligent part of our community voluntarily seek vaccination. The enforcement of the ordinance in reference to the public schools is done in a very thorough and systematic manner.

It is the custom of the health officer to confer with the superintendent of the public schools in the months of October and February of each school year, which results in the principals requiring teachers to report to the suderintendent the number of unvaccinated children applying for admission to the various schools in the city.

When the superintendent has acquired this information he in turn notifies the health officer of the exact number of children to be vaccinated. A program is then arranged by the superintendent of schools and the health officer whereby the principal of each school is notified of the day and hour when a physician from the health department will be present for the purpose of vaccination. The pupils to be vaccinated are in turn notified to present themselves with perfectly clean arms at the time appointed to receive the operation of vaccination.

By a strict adherence to the program as outlined, the entire unvaccinated public school population are reached within a week or ten days, twice in each year, and oftener if thought advisable.

Being governed by the reasonable desire for the protection which vaccination affords many of our more intelligent people who employ help, acting upon the advice of the health officer, require evidence of successful vaccination as one of the conditions of employment.

We use both points and hermetically sealed, glycerinated glass tubes, rather prefering the tubes, as our experience leads us to believe that there is less inflamatory action ensueing.

In our hands, most marvelous results have been obtained, at least 90 per cent. of primary vaccinations proving successful, if the operation is done after the following fashion:

Site–The insertion of the deltoid in the left arm is to be preferred in children who are old enough to walk, and in adults.

The outer side of the thigh below the junction of the lower and middle thirds may be chosen in women and infants, sometimes also the junction of the middle and upper third of the leg on the outer side.

Asepsis–The hands of the operator had best be thoroughly scrubbed with soap and water before undertaking this little operation.

The point of vaccination should be thoroughly washed with a brush and soap, then with plain water, and lastly with alcohol on a piece of sterile gause or cotton, allowing the alcohol to evaporate.

Scarification–Scrape at least two surfaces not over $\frac{2}{3}$ inch., each in diameter, sufficiently to bring a little blood or serum.

An ordinary cambric needle is the best scarifier, and this should be passed through a flame before using.

Virus—Use preferable glycerinized virus; rub thoroughly into the scarified area with a small piece of wood which has been previously boiled. Allow the part to dry in the air: no dressing is necessary.

I have dwelt upon this feature of this paper because, vaccination is not only an ausolute preventative against the inception of small-pox, but should the disease by any means get a foot hold, vaccination and revaccination will rapidly and surely eradicate it.

The truth about the matter is, that the time has come when failure on the part of any community to gratuitously, regurlarly and systematically practice vaccination as a prophylactic measure, is as criminal as it would be on the part of a practicing physician to neglect the use of antitoxine in diphtheria, mercury and iodine in the treatment of syphilis, quinine in the treatment of malaria, salicylates in the treatment of rheumatism or atropin in the treatment of opium poisoning.

So much for vaccination. We will now huriedly refer to our practice in reference

to isolation. The health officer recommended the following, which became a law in this city February 6th, 1899: "That any person who shall have the smallpox, and refuses, on the demand of the health officer, to be sent or to be taken to the Eruptive Hospital, or to remain at said hospital, after being sent or taken thereto, during his or her illness from said diseases or before being discharged therefrom by its superintendent, shall be fined not less than twenty-five dollars, nor more than one hundred dollars, for each offense."

It will be observed that the health officer has absolute authority to compel isolation by having all persons conveyed to the Eruptive Hospital, which is situated at least five miles from the city, on a large tract of land which belongs to the city. Since I have had the honor to be health officer of this city, we have had 661 cases of smallpox, and that you may know how I have exercised my authority in this direction I report the fact, that out of this number all were sent to the Eruptive Hospital, and thus put in complete isolation, with the exception of nine persons, and they were in such physical condition that their lives would have bean endangered by removal, and I will say that three did die within forty-eight hours.

When a suspected case of smallpox is reported to the health department by a physician or otherwise, one of the physicians connected with the office, who is experienced in the diagnosis of the disease, visits the suspected case, and if found to be suffering from smallpox, the ambulance is imediately telephoned for and the patient is removed to the Eruptive Hospital. The physician then vaccinates the immediate neighborhood. The next step is to send an inspector from the health office who knows his business, and all the old bedding and woolen fabrics in the infected house are saturated with coal oil and cremated, the city remunerating the owners of the property thus destroyed.

The infected house is then tightly closed and fumigated with formaldehyde gas. We use the H. K. Mulford Regenerator and a 40 per cent. solution of formalin.

Health departments all over the country after having tried all known means of disenfection have almost unanimously concluded, that formaldehyde is the most destructive agent to germ life now known, and our own personal experience fully justifies this almost universal opinion.

I am enabled to say, that in almost every instance, when cremation and formaldehyde disinfection for a period of from four to six hours has been practiced we have not had a recurrence of smallpox.

While formaldehyde gas is a destroyer of oders, it has scarcely any oder itself and it does not attack metal as does sulphur and other substances which are sometimes used for disinfection.

In the use of this agent for the destruction of germ life, it is neccessary to first close the windows, doors and other openings of the room or rooms to be disinfected, as tightly as possible with folds of paper, wet batting or or old cloths. Bed cloths, carpets and other fabrics, should be lightly spread over chairs and bedsteads. The amount of formaldehyde to be used in any given space can be obtained by multiplying together the length, breadth and heigth of the room or rooms and then allow from eight to twelve ounces of a 40 perc ent. solution of formaldehyde to each 1000 cubic feet of room space to be disinfected.

It will thus be seen that it would require thirty fluid ounces of formaldehyde to properly disinfect a room 15 x 20, with a celling 10 feet high. This amount of formaldehyde will be evaporated in about forty minutes. The space thus treated should be kept closed from six to twenty-four hours.

There has recently been placed upon the market a para-formaldehyde candle, put up in two sizes, which can be used as are the candles of sulphur dioxide. These candles consist of para-formaldehyde incorporated with a small proportion of parafine, pressed in cylindrical form.

These candles are supplied in a tin container, or burner, to which a limited amount of oxygen has access during operation, so as to support combustion only at the bottom of the candle, and by burning in this manner the heat produced causes the solid para-formaldehyde to revert to the gaseous formaldehyde.

The smaller of these candles contan 950 grains each, and when ignighted, generates sufficient gas for the surface disinfection of a room not exceeding 300 cubic feet capacity, and by increasing the number of candles, in the proportion of one candle to every additional 300 cubic feet of air space, any sized room can be disinfected

The larger candles containing 700 grains of parafin, are useful in disinfecting larger spaces, such as halls, churches and school houses.

Exhaustive tests have been made by the bureau of bacteriology of the health department of the City of Buffalo, N. Y., as to the destructive efficiency of these candles. These experiments have fully developed the fact that all pathogenic microbes and

spores are energetically destroyed without exception, by their proper use.

It should be remembered, that formaldehyde gas disinfection can not be positively relied on so far as glazed surfaces such as china, marble, metal etc., is concerned, and that subsequent washing of these surfaces should be practiced, with a solution possessing such recognized properties as a 5 per cent. solution of formalin, carbolic acid, or some other disinfecting solution possessing solvent and penetrating germicidal powers.

I will say for the imformation of any one who may wish to try these candles for disinfecting purposes, in any character of contagious disease, he can be put in communication with the state agent by communicating with the health department of this city.

Now to sum up the suggestions contained in this paper which are already too lengthy. I will say that; vaccination and revaccination promises absolute immunity against variola, one of the most disgusting diseases with which the human family have to contend. Secondly; that perfect isolation completely checks the spread of variola, and thirdly; that disinfection properly performed with formaldehyde gas, does beyond any reasonable doubt, destroy bacteria llife. If these three methods as suggested will accomplish what is not only claimed in this paper, but confirmed by the experience of the whole world and admitted by all intelligence both professional and otherwise, why should smallpox prevail in any community? And are not those in official authority morally responsible for not providiug the proper means to prevent sickness and death from such a disgusting and loathsome disease as is smallpox?

Can a Typical Case of Enteric Fever be Broken Up?

By G. A. Davis, M.D., Summit Point, W. Va.

If you will follow me, I am sure that I can prove conclusively that it can. It being an established fact that the seat of the lesion of enteric fever being Peyers Patches in the small intestine and that the ulceraation of the said patches is caused by a specific germ peculiar to enteric fevers, and that the ulceration commences at or near the illeo-cæcal valve and from there extends in successive ulcerated patches up the small intestine, that the successive ulceration is what causes the continuance of the disease, the more or greater number of patches that are ulcerated at a given time causes the severity of the disease, and *vice versa*, the mildness.

Now to prove that the disease can be stopped or its course abridged. How are all external ulcers stopped? By cleansing and making health sores of them. Then as ulcerated glands or patches cause enteric fever by cleansing them and making them as healthy as possible and having the bowels as aseptic as possible by the use of antiseptic medication healing the already formed ulcers. Killing the germs and preventing the formation of other ulcers thereby abridging the course of the disease. The life of an enteric intestinal ulcer is from 5 to 8 days, and by proper treatment no case of enteric fever should extend longer than eight (8) days after being seen by the physician.

I have made a special study of enteric fever for the last 20 years, and in the last three (3) years have not had a single case to last over 10 days from my first visit, and the majority 7. (There has been very few cases with me this year, so far I have only attended 12 cases).

To prove that I have not been mistaken in my diagnosis I will report a case I attended in 1900.

J. L. S., aet. 23, had been feeling unwell for some 2 weeks; not really sick but tired, and being a farmer had continued at his work until he could not go any longer and took to his bed; is of fine physique, dark, and muscular, but no superabundance of fat. Was restless at night, headache, &c. Upon examination found his A. M. temperature 102 deg., and his P, M. 105 deg.; face congested, tongue coated and red on edges, and tremulous, pulse dicrotic, bowels loose and bad smelling, urine normal in quantity, but very red, tenderness and gurgling in right groin, eyes also red. Nurse stated that when asleep would mutter and pick at clothes, but when awake mind clear. No appetite at all, but desire for cold water. I pronounced it a case of enteric fever and ordered exclusive milk diet, a hot soap bath at once, and to be sponged with equal parts of grain alcohol and water whenever the fever was high or over 103 deg. S. Cleansed his bowels thoroughly with calomel and oil, and put him on salol, zinc. sulpho. carbolate, strych., arsen., chlorate of potassa., and if very restless at night to give 20 grains bromide potass. In (6) six days my patient's temperature was normal, tongue clean, bowels natural, and I pronounced him convalescent, and left him to be careful of his diet and get well.

I use the purest and best medicine I can buy and furnish it to my patient. I use

Merck's salol and get the zinc sulph. carb. of the Abbott Co. The above is about an average case. I live in the country and take plenty of time with my patients, often staying several hours and watching the effects of my medicine, and will say that in 22 years of active practice I have as yet my first case of enteric fever to see die, that is uncomplicated. By complication I mean such as kidney, liver or lung trouble. I do not say this to boast, but to prove my assertion.

The Pantherapist and Neotherapeutics.

By C. H. Kermott, Fort Totten, N. D.

We are living in an age of expansion and rapid progression. Expansion generally follows united efforts. By the union of states the United States of America has become the greatest nation upon the face of the globe. By the union of nations every separate nation is compelled to respect its own people, and punish them, when it is deserved by them.

A union of the different classes of therapist which we have in the United States, of America, would bring about a much more satisfactory condition of affairs than that which exists at present.

We do not doubt that all classes of physicians in these states are doing the best they can, and that there is perfect honesty in their intents. Each class, so far, is trying to run in the particular groove in which it has been educated. When these classes meet with those not of their ideas, there is frequently a clash, and, as in a hurdle race, each tries to throw obstacles in the way of the other, invariably one, but generally both are injured.

THE PANTHERAPIST.

The Pantherapists, as the name implies, are those who in their care for all are ready and anxous to draw their information from any and every source that is conducive to lessen the cause of disease, restore the health of the afflicted, and assist all who come under their care to be hale, hearty and happy.

Any class of men who exert themselves to this end is deserving our sympathy, support and cóoperation. They who would make others happy, should themselves possess healthy bodies, cheerful countenances, and give hearty greetings, laugh and be happy.

Among physicians none antedated the Allopathists, or Regular Physicians. They have spared no expense in obtaining their education, nor placed any limit to their researches, or modes of treatment. They have investigated man, his mechanism, composition, constitution, and differentation in every manner imaginable, both physically and mentally. They have examined the kingdom of nature, if not throughly, yet more thoroughly than any other class of physicians, that they might have all that could be obtained in prolonging life and procuring health and happiness.

When we consider our extensive research and labor, can we not claim the name *pantherapist?* We are genearally so in practice; why not in name?

Other classes of physicians have not been idle. The Homeopathists though their system at first appearance is diametrically in antagonism to ours, have brought to light much useful information. They have had success in pedriatics, and many a living mother and father are untiring in their praise of Homeopathist for having restored their children to health, when others have given them up to die.

The Osteopathists also commands our attention in restoring to health those, whom many physicians thought and pronounced incurable; by their system, it is claimed, a better circulation of the vital fluids is produced.

There are others whose aim it is to cure disease, whom we believe to be honest in their convictions, as the Eclectic, the Electro-therapist, the Helio-therapist, the Hydropathist, and others.

In fact I believe it is our duty to honor and respect those who teach openly that which they believe. But those who practice their arts (if they have any) in secrecy I have no faith in.

As an individual I must protest against what is termed "Christian Science" and "Faith Cure" as an outrage upon civilization, as a farce played to delude the ignorant, and as the cause of many an untimely death from neglect of proper treatment.

Christianity and faith I believe are both necessary for our eternal happiness and for our spiritual existence; for our physical existence physical remedies are wanted, and these the Almighty has lavishly provided for us to take advantage of.

The Christian Scientists and Faith Curists are the only ones, so far as I am personally concerned, whom I would not be willing to have enter the pantherapic ranks.

Should such a union of earnest, honest physicians take place, though holding different opinions, the result would be in many respects advantageous.

First, a better acquaintance with one an-

other would be established, and this would promote an interchange of ideas.

Second, in union there is strength.

Then let us measure idea either with or against idea. Though we who contended may each die with our individual ideas, yet those who examine that which we have said or written, will be able to select the truth, or approximate it. Truth will stand the jar of all opposition, and they who will hold it, need not be backward in speaking or writing it.

Let the Regular Physicians organize, and invite all who are honestly practicing the healing arts to unite with them, the only demands to be made upon the members to be fee enough to cover necessary expenses, and to comply with the rules of the order. After a set time, and when we are acknowledged as a body of Regular Practitioners by the Legislature, let none enter our ranks without an examination by a board of at least six members and the president. Let the motto of our order be: "Prove all things. Hold fast to that which is true."

Then, were it left to my choice, I would require answers on the following subjects from those who farther desired to unite with us:

Human anatomy,
Morbid "
Regional "
Chemistry,
Physiology,
Histology,
Toxicology,
Obstetrics,
Description of diseases,
Classification of diseases,
Diagnosis " "
Surgery, minor,

and at least twelve of the most important medicines selected by the board from some first-class materia medica, as approved by them.

It is best to have few tools and know how to use them, than a great many and not understand their uses.

The course of examination would probably be enlarged by questions added from works that the Allopaths have never handled, but let no question be propounded, unless either text-books can be procured on the subjects, or printed lectures may be had. This will call for *Neotherapeutics*.

NEOTHERAPEUTICS.

Neotherapeutics does not necessarily change the modus operandi in treatment of diseases where drugs only are used, but in using other treatments the change is marked. Very often are two or more modes of treatment so combined, as to not only restore the patient to health in a few days, but to afford a pleasure to the invalid during his illness.

A great revision in medical remedies should be considered. We have in fact so many medicines to think of, that we become sometimes almost lost when the time comes for selecting something for a particular case. Not the question "What is good," but "Which is best." Many of our medicines, too, should become obsolete, or kept only as a curiosity for the medical antiquarian. Others, which have been dropped, should be brought into prominence, as Bole Armenia which, by its peristaltic action on the intestines, triturated with quinine might be classified with the specifics in the cure of typhoid fever. No cathartics are needed.

Our country is young, only entering upon her 126th year, and her young physicians have sprung from as noble stock as Eastern countries ever possessed, and with expanding talents have as good a right to form a broader platform, than ever yet was formed, and enter thereon, as had any in past ages. Discard the doubtful medicines. Select those thoroughly tried and approved. Let us profit by the experience of others, and remember your remedial agents should be as varied as your patients are. What would you think of a man who would attempt to repair a watch with such a set of tools as they repair locomotives with? And what do you think of men who attempt to repair the health of strong and vigorous men, when temporarily ill, with the same remedial agents with which you would attempt to restore the health of babes?

Let prejudice no longer fill our minds to cause us to think that we are the lords of creation, and that "when we perish, wisdom will perish with us." Others may be as wise, perhaps wiser, than we are, but their wisdom runs in another channel than ours. If we receive from them that which they have, and impart to them that which we have, both will be benefitted.

Variety is one of Nature's laws. Think of the variety of esculent plants that grow in one garden, or one continent or in the world, all used for food, each having its peculiar habits and each adapted to the people with whom it is found, and each when eaten has its peculiar effects on the human system, when properly selected, masticated and digested, each particle helping to repair the waste of the body, and in turn improperly used these very foods produce pain, sickness, and finally death.

The physician then ought to be an instructor and teach the healthy to remain as they are and the sickly how to live. When proper food will restore health, do not resort to medicine. When a sound mind is

required, give proper mental food or rest of mind, as may be necessary; these failing call in a specialist.

I think it was Cowper who wrote "Lands separated by a narrow frith abhor each other, and mountains make enemies of nations."

The railroads and steamboats have done away with Cowper's times. May not also *mental railroads* and newspaper navigation do away with the opposition that has existed among physicians, and lay a broader platform, than ever yet has been laid? All are needed who can render help in the cure of those who are diseased either mentally or physically. May we not call that platform *pantherapism?*

"What are you going to do with the Allopathists?" says one. Dispense with him? Not by any means. If the different therapies have severally saved lives by the hundreds, Allopathy has saved its thousands. And the Alllopathist who can show himself skilled in his profession, should be a specialist and entitled to special fees. Write (*iatros*) I-a-tro-pist after his name. Give honor to whom honor belongs, and let each class have its own specialists. All specialists then should rise from the platform of Pantherapism. On this platform each man has an opportunity of becoming broad-gauged so when he rises above this stage to special work and needs assistance, he will better know what other specialist or specialists to call to his aid. The Young Pantherapist should have resort to but few medicines, but necessarily twelve, and not exceeding twenty-five. This amount will not require much time to master, and should not be considered burdensome to the Ostopathic, the Electro-therapist, the Hydropathist, the Hysteropathist, or any other specialist or practioner who may at times require them, and in the hour of danger he will be enabled to make a judicious decision.

Learn from the little sapling which expands its roots in every direction, some running deeply into the earth for water and minerals, others through the sands and alluvial deposits, drawing nourishments from the various foods that mother earth keeps in her coupboard receiving just enough and no more than is necessary to satisfy its requirments day by day spreading its numerous branches, gladdening the hearts of men, and continues to grow until it stands proudly as high as the tallest trees around it, and finally may tower above its fellows on account of its nutritious diet.

Let the young physician draw sustenance from every branch of the healing art, so that by reason, comparison and experience with the wholesome diet he has received from every source, whether from the mental, moral or physical world, that those who come under this care may know and feel that the sources from which he has drawn his knowlege are not shallow, but deep.

Scarlet Fever---Its Treatment.

By James A. Knight, M.D., Eatonton, Georgia.

It is not within the scope of this paper to present an elaborated discussion of the etiology of scarlet fever, now prevailing as an epidemic in the Southern States. From Sydenham, who first recognized the disease as distinct from measles, with which prior to his time it had been confounded, down through the researches and observations of Murchison Klein, of London, Lœffler, Coates, Klebs, Wagner, and others, much has been accomplished. Scarlet fever is a specific form of infectious disease.

Like other diseases of the kind, it may, and often does, vary in the form of its expression—at times presenting the adynamic conditions and symptoms of typhus fever, with hemmorragic tendencies, again assuming features of typhoid fever, with nephritic complications, described by the French as "*Feevte, Typhoide a fomie de renale* and as "*Nephro-Typhus*" by the Germans. In the malignant form of the disease, the fever sets in with great severity, accompanied with extreme restlessness, headache and delirium. The innitial delirium, being rapidly succeeded by coma and urgent dyspnœa; the pulse becoming very rapid and feeble with a temperature rising as high as 108 deg. In the hemmorrhagic form there is noticeable hematuria and epistaxis. The Erythematous rash presents marked petechiæ which gradually becomes extermined?

In the anginose form of the disease the throat symptoms appear early and progress rapidly. The tonsils and fauces becomes swollen and membranous exudations are constantly forming. This condition may extend forward, as I have noticed, into the mouth and run up into the nostrils; the glands of the neck become enlarged and necrosis of the tissues of the throat occurs, producing a very offensive fœtor. There is very great constitutional disturbance presenting all the symptoms of Dyphtheria.

The milder forms of scarlet fever are not difficult to diagnose, and yet there are cases in which the true nature of the disease is for a considerable time very doubtful. The milder forms of the disease are often mis-

taken for Acute Exfoliating Dermatitis, for Ordinary Measles, Rothlen, Septicemia, Dyphtheria and Drug Rashes.

The epidemic now prevailing in Middle Georgia, as far as I have noticed, is generally of a mild form, the per cent of mortality being small. Where the proper precaution and remedies have been used there have been but very few deaths.

Treatment.—Scarlet Fever is one of those diseases that cannot be aborted. This I have observed to be uniformly the case with the severer forms of the disease. Professor Osler properly remarks, "There is no "disease in which the successful avoidance "of complications depends more upon the "skilled judgement of the physician and "care with which his instructions are carried "out."

Observing carefully the usual precaution of isolating the patient to prevent the spread of the disease, regulating as far as possible the temperature and ventilation of the sick-room, I begin my treatment of the disease by prescribing mercury. After a test of their virtues in hundreds of cases that have fallen under my care I heartily commend the "*Compound Mercurial Pearls*" as prepared from the formula, Dr. Morris M. Keider, of Lincoln, Mass. This admirable preparation gives the specific action of mercury and is unaccompanied with the disagreeable secondary effects of the drug. No nausea, no intestinal pains or loss of nerve force. I am much pleased with this particular preparation of mercury, and especially as an eliminating agent in the treatment of adynamic fevers, when we wish to conserve the vital powers of the patient as much as it is possible to do.

As my method of treatment follows closely the rational system of elimination by the judicious use of laxatives and diuretics I use, in connection with the mercurial preparation above mentioned, I use an antiseptic diuretic, one that will retard the breaking-down tendency of the tissue, and of the corpuscles of the blood, and correct such malignant conditions of the general system of the disease.

I know of no preparation that meets these indications better than Ecthol, as prepared by Battle & Co., Chemists of St. Louis, Mo. I have found this beautiful triumph of the pharmacist to be a most valuable preparation, always meeting the indications of diptheritic symptoms in scarlet fever and cannot too highly extol its virtues as an antipurulent. It is upon these two remedies, the Compound Mercurial Pearls of Prof. Keidder and the preparation of Ecthol by Battle & Co., that I have and continue to rely with the assurance of confidence. In the treatment of over five hundred cases of scarlet fever I have used these remedies with uniform and most gratifying success.

Just here, and par parenthesis, permit me to say that I have found Battle's preparation of ecthol to be an invaluable prophylactic, checking the spread of the disease, destroying the bacterial germs and placing the system of non-affected persons in such a condition as to render them almost, if not absolutely, immune. I have prescribed ecthol with this object in view in families where several children have been exposed to the contagious and poisoned atmosphere of malignant scarlet fever, with the uniform result of exempting the unaffected child from the disease. In smallpox and all scorbutic affections I have found ecthol superior to any remedy I have heretofore used.

The treatment above-given is that adopted by me, after many years of experience in marked cases of scarlet fever with hemorrhagic or anginose complications. I have found that the milder forms of the disease, rubella and roseola, do not require much medicine. The bowels of the patient should be regulated, mild aperient used and the body sponged occasionally with a solution of ecthol in warm water—three parts of ecthol to one of warm water. When desquamation begins I use sweet oil and ecthol in equal parts, applying with a soft woolen cloth to the body and rubbing the parts gently. When the patient is convalescing great care must be taken to prevent the exposure of the patient to cold. It is during this period in the progress of the case that the kidneys become affected. I have known nephritic cequences to follow after all danger had apparently passed, and the patient was thought to be fully recovered from the disease, but I have yet to be troubled with the first case presenting any grave nephritic conditions where ecthol had been used as above indicated, and I have treated over five hundred cases of scarlet fever in every form of the disease.

The well-known Austrian scientists Professor Loeffler and Dr. Uhlenhuth, announce that they have discovered a serum which will protect animals against the foot-and-mouth disease. This serum affords to animals inoculated with it immunity for from four to eight weeks against infection form the disease. As soon as Drs. Loeffler and Uhlenhuth receive the authorization of their government the new remedy will be placed to the disposal of the public.

THE

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Editorial Department.

E. C. REGISTER, M. D. J. C. MONTGOMERY, M D

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SUBSCRIPTION. $2-50 PER YEAR,

PROFESSIONAL ORGANIZATION.

One of the most pertinent subjects which should have the united attention and co-operation of the medical profession of every state in the union, and of every individual of the profession, especially so at this time is organization.

At the meeting of the American Medical Association at St. Paul, Minn. in June 1901, there was enacted a more or less general reorganization of the Constitution and By-laws of the Association, of which a very clear explanation was given in an editorial, in this Journal for July.

The reorganization makes the County Medical Society the unit of the completed federation. The members of the County Societies to be elligible to attendance and to be members of the State Society. The State society is represented by delegates in the "House of Delegates," the legislatives section of the American Medical Association. Thus giving the entire medical profession by this plan, an interest and representation in the National Organization.

Some few states are already organized under this plan and need only a few minor alterations in the selection of delegates, etc.

Immediate steps should at once be taken toward the arrangement of the state organizations upon this plan.

County societies shoud be formed at the earliest practical date in every county throught the union, where such does not already exist; also especial efforts should be made by existing societies, to have all regular physicians to unite with their local county society. The importance of this work cannot but be apparent to every medical man who has an honest interest in his profession.

Each member will feel the stimulus of his association with the body of his professional brothers. He will appreciate his interest in the State and National Organization and their work.

The county societies being best acquantied with each practitioner will thus act as censors of the own members and consequently of those of the State and National Association.

This will perfect the scheme formulated by the committee on reorganization, which it reported at the June meeting.

It will put the entire profession in one great scientific working body; enabling it to more thoroughly work out the problems that confront it.

PREVENTABLE vs. CURABLE DEAFNESS.

To the average practitioner, trouble with the ears is a *bete noir* and the less he has to do with deafness the better he is pleased.

Man is given about four times the hearing power that is absolutely necessary for his daily needs, and until he loses half or more, the patient rarely seeks the aid of a physician.

By the time he does so the mischief accomplished may be, and usually is, beyond relief, and it is good fortune if the advancing trouble can be arrested or even delayed.

Deafness from eustachian catarrh, acute inflammations, impacted cerumen or foreign bodies, adenoids and other diseases of the pharynx and naso-pharynx, aural polypi, and chronic suppurations that are not accompanied by too great loss of tympanic structures, may be improved by treatment; but far the most frequent form, middle ear sclerosis, will generally march straight on with occasional halts and recessions to hardness of hearing, severe deafness or total loss of useful sound perception.

In a class *sui genosis* belong the cases induced by the exanthema, cerebral inflammations and traumatisms.

No aurist of great experience will attribute much of his fame to his success in improving dry middle ear catarrh.

The etiology of this disease has been obscure, but evidence is rapidly accumulating that its commencement is in childhood and that the source of the trouble is in the naso-pharynx and nose.

With the rapid spread of knowledge of the prevalence of adenoids and of suppuration of the accessory nasal sinuses and the effective operative treatment of them the cases are rapidly diminishing which have recruited the ranks of middle age deafness.

In order of frequency the causes of preventable deafness may be placed as follows:

First. Adenoids which includes the en-

tire adenoid ring, over the tongue, tonsils, and pharyngeal adenoids.

Second. Subacute and chronic inflammation of the nose and naso-pharynx and

Third. The exanthemata.

The circulation of the middle ear and eustachian tube is connected directly with that of the inferior turbinate and inflammation of the latter is accompanied by swelling of the mucous membranes of the former. Thus is produced a chronic hyperæmia of the ear which is favorable to the deposit and growth of connective tissue.

Then by continuity of tissue the ear is injected with germs from the naso-pharynx whose presence also excites inflammation. Thus are the requisite conditions for the deposit of connective tissue met and the foundations laid for sclerotic middle ear catarrh.

The oftener adenoids are looked for in children the oftener will they be found and the more will the necessity for their removal be emphasized whenever they produce discharge either posteriorly or through the nose, whether they obstruct the breathing or not. Their removal will usually check the discharges both anteriorly and posteriorly, congestion of the nasal and pharyngeal membranes will disappear, and the drums lose their red and thickened appearance. Frequency of head colds will diminish, together with the accompanying periodic deafness, but most important of all the deposit of connective tissue in the middle ear will be stopped and atrophic otitis media become impossible.

A very large number of deaf mutes, over 50 per cent., have lost their hearing because of scarlet fever and the other exanthema. The number is needlessly large.

If every physician made it a routine practice to examine the ears and naso-pharynx in his cases of scarlet fever, measles, etc., many cases of commencing middle ear inflammation would be detected in time to be arrested or carried safely through a course which would otherwise cause severe deafness.

Ill advised efforts to remove hardened cerumen and foreign bodies, by instrumental means, while the patient is struggling and the parts are poorly illuminated have caused many ears to be lost.

All physicians should make themselves familiar with the practical examination of the ears and naso-pharynx, and fit themselves to handle the simple cases detailed above. If they did so and then did what their plain duty required, the next generation would undoubtedly show a marked falling off in the number of deaf mutes and middle ear deafness of adult life would practically disappear.

CONSUMPTION.

This arch enemy of the human family. This disease which cuts down annualy such an army of the useful and active members of mankind, is just now receiving the most searching study and consideration. It is being studied that we may understand fully its nature; its method of action and development in human individual.

Prof. Koch in his recent address before the British Congress on Tuberculosis, describes his extensive experiments and investigations with tuberculosis in cattle and other animals, has proved by his experiments conclusively the impossibility of transmitting human tuberculosis to cattle and other animals.

Besides Koch, other investigators have demonstrated positively the impossibility of transmitting human tuberculosis to animals. A radical difference has by all of these investigators been recognized between the human and animal tubercle. Reasoning *per contra*, we may with equal propriety conclude in consideration of this difference and the inability to infect animals with human tubercle, that man likewise will not be infected from animals as by the use of meat and milk of the cow, as it has been so fully believed and acted upon by many sanitarians up to the present time. The proof that man cannot be infected by animal tuberculosis remains, however to be more positively demonstrated. A fact more difficult to demonstrate by the peculiarity of the case. The physiological laboratory and exact observation may finally lead us to the truth of the matter.

The delusion of heredity as the only source of consumption once dispelled from the minds of members of the profession and of the laity; with the education of the masses to understand the facts regarding the contageousness of the disease; the method to eradicate the disease becomes plain.

The source of the disease is by the sputum scattered by coughing, and in baccilla laden breath. These patients should be isolated, not necessarily removed from the family, if he is a member of one, but at a proper and safe distance and in suitable quarters. The germ laden material can be cared for and destroyed before it finds lodgment on carpets, bedding or walls to dry

and becoming powdered to be wafted by the air to healthy innocent persons.

This becomes a problem for the medical profession; the general practitioner. This problem must be worked out. It will take time. but a great work will be achieved.

As Koch well remarks in his conclusion "If we allow ourselves to be continualy guided in this enterprise by the spirit of genuine preventive medical science, if we utilize the experience gained in conflict with other pestilence, and aim with a clear recognition of the purpose and resolute avoidance of wrong roads at striking at its root then the battle against tuberculosis, which has been so energetically begun, cannot fail to have a victorious issue."

NEGLECTED PROPHYLAXIS.

The dangers of infection from flies, mosquitoes, rats, fleas, etc., are greatly in evidence just now, and most properly so; it seems strange the simplest truths are slowest to be grasped.

The fact that the human mouth is one of the greatest, if not the chief source in supplying bacteria to the blood and alimentary tract seems only partially to have taken hold of the profession.

That the mouth is the most perfect incubator for the greatest variety of micro-organisms can not be controverted and when neglected and unclean it is without doubt the filthiest place about the human body; almost every variety of gas-forming and putrefactive microbe will multiply there with enormous rapidity.

Miller has estimated that in a very unclean mouth, there are at least 1,140,000,000 organisms at any time, and he has studied over one hundred varieties of mouth bacteria, finding a goodly number to be pathogenic. A widely open port for their entrance to the blood is diseased gums. every one has more or less tartar upon the teeth, and a large percentage of people have a sufficient accumulation of it at the necks of the teeth to cause the gums to be continually diseased, thus a large number of blood vessels are continually in a condition to inbibe or permit the entrance of germs in the blood.

A coated tongue and decaying teeth also freight the saliva with germs, the saliva is being continually swallowed, thus the seeds of fermentation and putrefaction are injested at every swallow.

Now if the capacity of the leucocytes is exhausted or diminished by attention to a continuous supply of harmless microbes, then their services can not be relied upon when needed to destroy more virulent kinds.

Not every one who is exposed to contagion or inoculation succumbs to the disease and it is reasonable to suppose that he who escapes is he whose leucocytes are in the most normal and active condition for attacking the enemy.

Since the mouth is the most accesable to care of all the openings of the body and is also the great vestibule for contagion, it should have the first and most scrupulous attention.

This is especially true when we consider that our inherent ability to resist disease, decreases with the advance of civilization.

Healthy saliva of animals, in their normal enviroment is decidedly alkaline; this accounts for their immunity from excessive deposits of tartar, decaying teeth, and most probably for their perfect digestion. Their contagious diseases are few and confined to those peculiar to their enviroments and habit.

A continously clean mouth with alkaline saliva, even though the latter condition be artificially produced, to be one of the most reliable prophylactic measure that can be adopted.

When the telegraph brought us the advance notice of Prof. Koch's address at the Tuberculosis Congress recently held in London, in which we were informed that Koch had actually declared Human and Bovine Tuberculosis to be distinct diseases—at least not communicable one to the other—we were inclined either to discredit the correctness of the report or to conclude that another genius had gone astray. Not so when we read his address; it is a lucid, clear-cut statement of well-put facts, and good logical conclusions deduced therefrom, and we are forced to cast aside the prejudice of deeply-rooted beliefs, and recommence the study of things we thought long ago to have been finally and for all times disposed of; and it will in all likelihood end in the general acceptance of Koch's views.

A brief resume of experiments and conclusions will not be out of place. Koch inculcated healthy cattle with human tuberculosis sputum, and found that no reaction followed the autopsy—subsequently made—revealing no infection. However, in each case in which a healthy animal was inoculated with bovine tuberculous material, violent infection followed, and autopsies demonstrated the existence of widespread tuberculosis. Besides cattle, asses, sheep and goats were experimented with in like manner, and, while the injection of human tu-

bercle bacilli caused no appreciable symptoms, the bovine tubercle bacilli gave rise in each case to a specific infection. Though proving that cattle were insusceptible to human tuberculosis, it was of course impossible to make the counter experiment to prove that man was not susceptible to bovine tuberculosis, but from the rarity of cases of primary intestinal tuberculosis in the enormously large postmortem records of several German hospitals, he concludes that there can be but little danger to human beings from the use of infected milk. Koch deduces from these experiments that the human sputum is to all intents and purposes the only source of infection, and throws out of practical consideration the elements of milk infection and heredity. He declares, furthermore, that only such efforts to stamp out this disease can be successful as are directed to the proper care of the sputum, clean and hygienic surroundings, and sanitaria for those too poor to obtain the proper care and attention at home.

A FINANCIAL OPERATION.

Of late quite a number of papers have appeared in the various medical journals advocating removal of the ovaries as a desirable feature in the treatment of inoperable cancer of the breast, the theory being that the germinal epithelium of the ovary exercises some mysterious influence favorable to the development of cancer cells in the mammary gland. Several cases have been reported where, in selected cases, ophorectomy was followed by an arrest of the cancerous growth and even, in a few cases, by complete disappearance of the morbid process. Equally good results have been reported, however, as following the internal use of arsenic, condurango, and other drugs, and even Christian Science and the imposition of hands. Owing to the well known fact that malignant new growths sometimes stop growing and apparently remain latent for a greater or less period of time, without any treatment whatever, the value of these very limited statistics is rendered at least questionable.

It is difficult to appreciate other than a financial indication for this line of treatment. A patient with cancer is ordinarily well-nigh desperate and will submit to any treatment if only relief is promised. An oorphorectomy is an easy operation and comparatively free from danger and affords the ambitious but impecunious practitioner an opportunity to increase both his fame and his bank account.

From a scientific standpoint this operation is on a par with castration for the relief of prostatic enlargement, the prostatic enlargement having the advantage that while the operation per se is not of the slightest value, it necessitates a certain amount of rest in bed during convalescence, which is distinctly beneficial.

THE TRAINING OF THE SPECIALIST.

While a knowledge of general medicine is essential to the best work in any specialty, that knowledge is best obtained in hospital and post-graudate work immediately following graduation rather than in private practice.

The time-honored notion that a man should limit his practice only after years of general practice is a fallacy, and it is very difficult to advance any valid reasons in support of such an idea. While it may be of great advantage to a prospective oculist to treat dozens of cases of summer complaint, or for the gynæcologist to treat numerous cases of infection of the male urethra, or for the rhinologist to attend numerous confinements, or the pediatrist to treat senile gangrene, yet it is not easy to appreciate that advantage. In point of fact, it is very hard to give up a general practice and take up a specialty, the patients not wishing to give up their family physician and the profession looking askance at a specialist who does general practice. As a rule, the best specialist is the one who begins young and devotes the early years of his professional life to conscientious hard work in his chosen fields.

A LEGITIMATE SPECIALTY.

Considering the importance of anesthesia in modern surgery and the peculiar dangers attending its use, it would hardly seem needful to urge the necessity for men specially trained in this line of work. It is a fact, however, that good anesthetists are exceedingly rare.

In no department of surgery is a thorough training more essential than in the administration of anesthetics, and no position at the operating table carries with it greater responsibilities than that of the anesthetist. He, even more than the surgeon, is responsible for the patient's life or death. He must not only thoroughly understand the nature and action of the anesthetic but he must be able to meet any emergency promptly and effectively. Coolness and presence of mind are absolutely essential, while rashness or timidity are as dangerous as carelessness or bad judgment. Any of these faults may cause the operator the

greatest worry and annoyance, to say nothing of the danger to the patient's life.

Different operators, as Junker, Braun, and Clover, have devised inhalers intended, by means of various mechanical safeguards, to obviate the necessity for a trained anesthetist. It is exceedingly doubtful, however, if any appliance, no matter how ingenious its mechanism, can take the place of the judgment and skill which result from a long and extended experience.

A SUGGESTION.

In discussing the case of President McKinley a great many theories have been advanced and suggestions made as to the cause of the necrosis along the track of the bullet. It would seem, however, that the most reasonable explanation may be found in the well-known destructive action of the low velocity of the bullet; the destruction in an inverse ratio to the velocity of the projectile. In the case of the President the velocity of the ball may be judged by the fact that the first ball did not even penetrate the skin. This, when considered in connection with the low vitality of the tissues should be sufficient to explain the gangrenous condition found at the autopsy.

NOTICE OF REMOVAL.

The offices and entire plant of the well-known establishment, the Rio Chemical Company, manufacturers of the universally known products, "Celerina," "Aletris Cordial" (Rio), and S. H. Kennedy's "Ext. Pinus Canadensis" (white and dark) have been moved to New York. In the future they will have no office in St. Louis, or any other place in the United States, except New York. All communications in the future should be addressed to Rio Chemical Co,, 56 Thomas St., New York.

The business of this establishment, both at home and abroad, having grown to such proportions, and in order that they may be in touch with their foreign offices, and be situated where better facilities could be offered for procuring the various ingredients that enter into the composition of their products are the reasons for their removal. In their new field of operation we wish them unbounded success.

The Detroit Medical Journal reports that a pair of twin sisters of West Virginia were married to twin brothers. Recently they gave birth to triplets within an hour.

BOOK REVIEWS.

Whitman's Orthopedic Surgery. For Students, Practitioners and Specialists. By Royal Whitman, M. D,, Adjunct Professor of Orthopedic Surgery, New York Polyclinic, Instructor in Orthopedic Surgery in the College of physicians and Surgeons, and chief of Orthopedic Department in the Vanderbilt Clinic, New York. In one handsome octavo volume of 642 pages, with 447 illustrations. Cloth, $5.50 net. Lea Brothers & Co., Publishers, Philadelphia and New York, 1901.

Great advancement has been made in Orthopedic Surgery within the past fifteen years. To-day it occupies a broad field and one of very great and general interest. This progressive advancement has been greatest in recent years along the line toward the prevention of deformity, an advance that has been made possible by the better understanding of its predisposing and exciting causes.

Naturally enough the treatment of these defirmities has become more direct more simple and effective. The author has paid especial attention to the subject of treatment. This is of great importance to the general practitioner, who so often has the opportunity to recognize diseases or disability in its incipiency, when its progress may be checked by timely treatment. The work has been presented to the profession by a man of large and broad experience which makes it modern, authoritative and helpful. The author, too, has presented the work from an objective point of view. The selection of each rubject and the space allotted to it has been determined primarily by its relative importance in the actual work of Orthopoedic Clinics. In this volume the author describes the methods of examination, explains the phenomena of the symptoms. Laying stress upon tbe fact that the particular methods of the application of these principles, which have been described in detail, and always those that have been tested by personal experience. The description of Potts Disease is very beautifully described. The chapter is complete. Scarcely could a more detailed and systematic account be given of any disease. The illustrations made in this section are excellent. Every other section of the work is handled in the same high class style. The author has presented the subject in a manner which his experience has taught him to be the most acceptable to students an practitioners, outlining methods of examination, explaining symptoms and so illustrating the causes and results of

Orthopoedic affections as to indicate in natural sequence the best treatment, which is thus explained in complete detail with excellent and telling illustration. Every method of treatment reccommended, whether operative, medical, or preventative is that which has stood the test of successful practice, and is accepted as the approved procedure of to-day. The volume contains 447 rich illustrationsn early all of which are from original photographs of actual cases in hospitals with which the author is connected. It is a singular fact but the diseases described in this volume are usually first brought to the attention of the family physician, and in this volume he will find a safe guide. The publishers have done themselves great credit in the publication of this excellent work.

The Principles and Practice of Medicine. Designed for the use of Practitioners and Students of Medicine. By William Osler, M.D., Fourth Edition. New York. D. Appleton & Co., 1901.

There probably lives to-day no man more universally respected and admired from a medical standpoint than William Osler. Just as he is admired from a personal standpoint, so are his writings and utterances eagerly sought and studied. This is the 4th volume of his excellent work. The profession is familiar with this work just as they know the man. Many important changes have been made in this edition. The article on Typhoid Fever has been in great part rewritten. The subject of malaria has also been remodled and much new matter added. The subjects of Dysentery, Yellow Fever, and the Plague have been rewritten and brought strictly up to date. Many new paragraphs appear on the important disease, Pneumonia. The new or partly new articles appearing in this issue are those on Acute Tuberculosis, Diseases of the Pancreas, Splenic Anæmia, Arsenical Poisoning, Herpes Zoster, Adiposis Dolorosa, Fibrinous Bronchitis, Albumosuria, Oxaluria, Meniere's Disease, Aphosia, Combined Sclerosis of the Cord, Myrosthenia Gravis, Congenital Aneurism, Surgical Treatment of Aneurism and Scurvy. This work is too well known to need further mention. The other editions have been exhausted and so will this one be very soon. We commend it to our readers in the highest possible terms and impress upon them the importance of securing a copy at once. The work bears the impress of high class work from a mechanical standpoint.

A Text-Book of Pharmacology and Therapeutics, or the Action of Drugs in Health and Disease. For the use of Students and Practitioners of Medicine. By Arthur R. Cushny, M. A., M. D., Aberd. Professor of Materia Medica and Therapeutics in the University of Michigan Medical Department, Ann Arbor. New (2) edition. In one handsome octavo volume of 732 pages, with 47 engravings. Cloth, $3.75, net. Lea Brothers & Co., Philadelphia and New York, 1901.

This is the second edition of this book. The first edition has been exhausted within one year. This speaks well for the book.

This volume is divided into an introductory.

Part I. Organic substances which are characterized chiefly by their local action.

Part II. Organic substances characterized chiefly by their action after absorption.

Part III. Combinations of the Alkalies, Alkaline Earths, Acids and allied Bodies.

Part IV. The Heavy Metals.

Part V. Ferments, Secretion and Tox-Albumins.

Part VI. Menstruation and Mechanical Remidies.

The first 42 pages is devoted to the introductory which gives the mode of action and effects of the different drugs; the methods of administration and their classifications. Under Part I. is given the Demulcents, Emollients, Simple bitters, Volatile oils, Skin iritants and Counter iritants Vegetable purgatives, Anthelmintics etc. The writer in describing a drug and its therapeutics is very concise in his statements, giving its exact usage in very few words. The subject of alohol which usually occupies a great number of pages in the ordinary work is considered here in few pages, yet it is considered thoroughly. This is a pleasant feature about this work. Then the work is systematically arranged and the text is made still plainer by excellent illustrations. The work covers the whole field of modern therapeutics from the standpoint of a comprehensive explanations of the reasons underlying all drug-action.

The author only selects those medicines which are worthy of use and explains their action both physiologically and clinically.

This new edition shows careful revision to bring it abreast of the latest advances.

A full index and sufficient bibliography complete a work of the utmost value to every one interested in the use of medicines. The volume is neatly bound and from every standpoint is a credit to the publishers.

Dorland's American Illustrated Dictionary. The American Illustrated Medical Dictionary. For Practitioners and Students. A Complete Dictionary of the Terms used in Medicine, Surgery, Dentists, Pharmacy, Chemistry, and the kindred branches, including much collateral information of an encyclopedic character, together with new and elaborate tables of Arteries, Nerves, Veins, etc.; of Bacilli, Bacteria, Micrococci, Streptococci; Eponymic Table of Diseases, Operation, Signs and Symptoms, Strains, Tests, Methods of Treatment, etc., etc. By W. A. Newman Dorland, A.M. M.D., editor of the "American Pocket Medical Dictionary." *Second Edition, Revised.* Handsome large octavo, nearly 800 pages, bound in full flexible leather. Philadelphia and London: W. B. Saunders & Company, 1901. Price, $4.50 net.

A large first edition of the work was issued in October, 1900. From the day of its publication the book met with a remarkably large sale, and the edition was exhausted in eight months. This immediate success is doubtless due to certain special features which distinguish this work from other books of its kind. The avowed object of the author has been to furnish in a volume of convenient size an up-to-date dictionary, sufficiently full for the requirements of all classes of medical men, or, in other words, to give a maximum of matter in a minimum of space and at the lowest possible cost. This object has been secured by the use of a large page, thin bible paper, and a flexible leather binding. The result is a truly luxurious specimen of bookmaking.

In this addition the book has been carefully revised. The author has also added upward of one hundred important new terms that have appeared in medical literature during the past few months. Among them appear "Anopheles," "Cryoscopy." "Johimbin," "Hemolysin," "Hedonal," "Sacretomy," etc,, words that have recently come prominently before the profession, and which of course are not to be found in any other dictionary.

Other valuable features of the book are to be found in the complete and satisfactory definitions, the etyological references in the original languages, and the clear method of indicating the pronunciation. There are over one hundred new tables, and the illustrations add greatly to the usefullness of the book.

In the preface the author avows, his intention of making the work represent as fully as possible the live literature of the medical sciences by keeping it in respects thoroughly up to date.

The Medical Examination For Life Insurance and its Associated Clinical Methods with Chapters on the Insurance of Substandard Lines and Accident Insurance. By Charles Lyman Greene, M.D., St. Paul, with 99 Illustrations, Philadelphia. P. Blakiston's Son & Co., 1012 Walnut St.

Life insurance, at once the most beneficent and useful of all business institutions, owes its present success, in no small measure, to a study of the hazards of the gaming table; nevertheless, it is the outgrowth of that love of family common to all men, whether barbrous or civilized; and one may safely assume that such protection as it affords in its primitive form is older than the pyramids.

Life insurance examinations have become quite a prominent feature in medical circles of late years. It has become so important that within the past two years a considerable number of medical schools have introduced into their curriculum a special course of lectures dealing with the medical aspect of life insurance. The physician is often confronted with serious and perplexing problems quite distinct and apart from those encountered in ordinary practice of medicine, hence the value of this work can readily be seen.

This manual supplies all information neeessary to the undergraduate or the examining physician and gives only such as is of real and practical value. The author has written his work so as to interest readers in the history and deve'opment of life insurance and gives the fundamental principles upon which it is based. He covers thoroughly all of the minor questions that are likely to arise and prove sources of misunderstanding or fiction between the home office and the examiner, or unfavorably affect the relations of the latter with the agent in the field or the applicant for the insurance. All questions appearing on the medical examination blanks are clearly and definitely explained, it is shown why they are there, what they demand and the best way to answer them. The chapters on the heart and lungs, the best method of making examinations, and the detection of physical signs, &c., have all received special attention. Special stress has been laid upon the proper procedure as the best method of examining the urine. Special chapters appear upon such important subjects as "Occupation," "Heredity," the role of inspection in Diagnosis, and upon that interesting subject "Conspiracies to defraud life insurance companies."

At a glance one can readily see the necessity and great importance of such a work.

The physician who examines for insurance should by all means study this book. We commend it highly. It contains many very fine illustrations. It is a handsome volume.

Progressive Medicine, Vol. III, Sept. 1901. Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in Jefferson Medical College of Philadelphia. Assisted by H. R. M. Landis, M.D. Lea Brothers & Co., Philadelphia and New York. Issued quarterly. Price, $10.00.

The third volume of the 1901 series of Progressive medicine well maintains the high standard of excellence that has marked the preceding issues. It contains the writings of four prominent contributors. The first contributor is Dr. William Ewart and he treats of croupus Pneumonia, Pulmonary Congestion and Oedema, Pulmonary Tuberculosis and many other chest affections. His writings are clear, forcible and to the point.

Dematology and syphilis are discussed by William S. Gotthiel. Sixty-three pages is devoted to this section. The different forms of skin disease treated are those most commonly met by the every-day physician, such as Acne, Adenoma, Alopecia, Carcinoma and Epithelioma, Warts, &c. Wise directions are given by the author as to the best management of such cases. William G. Spiller, the well known writer, contributes an able section on Diseases of the Nervous System. Such difficult and common diseases as Cerebral Tumor, Cerebral Abscess, Hemorrhagic Encephalitis, Hemiplegia, Meningitis, &c., have received his most careful attention, and those who are guided by his teachings will meet with success. The important subject of Obstetrics is most excellently considered by Richard C. Norris. He fills his department full of interest and his teachings are wise and conservative. Handsome illustrations elucidate the text throughout the volume. Editor and contributors alike are entitled to the thanks of their wide audience for having produced a volume so practical, and yet of a standard creditable to American Medicine.

Dependent, Defective, and Delinquent Classes and their Social Treatment, by Charles R. Henderson, Professor of Sociology, University of Chicago. Second edition, enlarged and rewritten. Introduction price, $1.50. D. C. Heath & Co., Publishers, Boston, New York, Chicago, London.

Dr. Henderson is a man without a peer in this field of work. He has been for more than a quarter of a century a student of the classes of which he writes. He has not only been a close observer of those classes and of the methods that society has adopted for dealing with them, but is also widely read in the literature of the subject and familiar with the organized wo k of Europhen countries in their behalf. He writes with full knowledge of all the light which the doctrine of evolution has thrown on social problems.

He lays hold with a firm grasp upon the fundamental principles which govern human society, and upon every aspect of sociological problems he has thought his way clearly to conclusions which will commend themselves to the common sense and experience of every intelligent and informed student. He treats his subject logically and with judicial temper, and has no hobbies, scientific or practical to cloud his judgment.

This book is a systematic study of the causes and consequences of pauperism, insanity, crime and affiliated evils. It is exhaustive, authoritative, and contains the latest available date concerning their questions. Social inititutions are described; their adaptation to ends is judged and valued; better methods are proposed according to the teachings of experience.

Essential factors, laws, tendencies, forces and methods are carefully stated. Statistics are used very sparingly in the body of the book.

In the appendix are given brief summaries of measurements, believed to be reliable within the limits defined, with full reference to the sources and authorities.

While this volume is nominally a second edition, it is almost entirely a new book. Since the first edition the matter and form have been tested and sifted by criticism, by wider reading and further practical experience in charity organization work, and by classroom instruction.

The scope of the work is shown by the following subdivision:

Part I, pages 1–39. The Phenomena of Dependence and their Explanation.

Part II, pages 40–168. Social Organization for the Relief and Care of Dependents.

Part III, pages 169–214. Social Arrangements for the Education, Relief, Care and Custody of Defectives.

Part IV, pages 315–338. An Introduction to Criminal Sociology.

Survey and Outlook, pages 338–349.

Appendix, pages 349–394.

Index, pages, 395–397.

The topical method of presentation and

the full list of authorities on every point make the work eminently practical and useful for students, and no modern college course in sociology can afford to neglect the study of the condition and treatment of these classes. Reclaiming those who are already Dependents, Defectives, or Delinquents and saving those who are in danger of becoming such, is the greatest work for the students of sociology to accomplish.

This work of Dr. Henderson's will be especially valuable to students in Theological Seminaries and to those engaged in Y. M. C. A. work, and as well to lawmakers, ministers, ethical societies, clubs, and all who, in the study of the social problems of the day, aim at practical philanthropy.

Vecki's Sexual Impotence. The Pathology and Treatment of Sexual Impotence. By Victor G. Vecki, M.D. Third Edition, Revised and Enlarged. 12mo, 329 pages, Philadelphia and London. W. B. Saunders & Co. 1901. Cloth, $200 net.

This monograph is familiar to us all. It has passed to the third edition with the most favorable comments from the medical press. The entire subject of sexual impotence and its treatment is considered and discussed by the author in an exhaustive and scientific manner. In this edition the volume has been thoroughly revised, new matter has been added, thus making the work thoroughly up to date in every respect. The second edition of the work was exhausted in two years. This speaks well for the popularity of the work. This subject has not been treated and considered in as fully and scientific measures as it should, so that this book when read will be a revelation of the possibilities of therapeutics in this important field. The work is a well written and is a scientific volume and we recommend it as a scholarly treatise on the subject.

Oral Surgery, a Text-Book on General Medicine and Surgery as applied to Dentistry, by Stewart LeRoy McCurdy, A. M., M.D., Author "Manual of Orthopedic Surgery," Pittsburg, Pa., Professor of Anatomy and Surgery, Pittsburg Dental College, Surgeon P. C. C. & St. L. Ry., member American Medical and American Orthopedic Association, Orthopedic Surgeon Presbyterian Hospital, Etc. 368 pages, 95 Illustrations. Cloth $3.00 net. Published by the Calumet Publishing Company, Room 315 Horne Building, Pittsburg, Va.

This work which applies to surgery of the mouth, is divided into two parts.. Part I. treats of

1. General Principles including Repair.
2. Acute Infections and the results.
3. Surgical Fevers.
4. Erysipelas.
5. Shock.
6. General Diagnosis.
7. Diseases of the Vascular Systems.
8. Asepsis and Antisepsis.
9. Anesthetics.
10. Principles in Operations, Wounds and Emergencies.

And part II. considers

11. Diseases of the Structures of the Oral Cavity.
12. Diseases of the Antrum and Other Cavities.
13. Diseases and Injuries of the Gums and Alveola Process.
14. Diseases and Injuries to the Tongue.
15. Diseases, Injuries and Neuroses of the Face.
16. Congenital Defects of the Face and Mouth.
17. Diseases of Bone.
18. Tuberculosis.
19. Veneral Diseases.
20. Diseases of the Salivary Glands.
21. Neuralgia.
22. Tumors.
23. Ankylosis.
24. Fractures.
25. Dislocations.
26. General Conditions Producing Oral Manifestations, and Oral Diseases Producing General Symptoms.
27. Plastic Surgery.
28. Prosthesis.

This interesting work is practically a compilation of the course of lectures delivered by Dr. McCurdy, and is published at the repeated solicitation of the students who desired a concise text-book as an aid to their study. It treats fully the various affections common to the mouth. The illustrations are very fine and to practitioners as well as the dentist it will be of great service.

Bergey's Principles of Hygiene. The Principles of Hygiene. A Practical Manual for Students, Physicians, and Health Officers. By D. H. Bergey A.M. M. D., Fis Assistant, Laboratory of Hygiene. University of Pennsylvania. Octavo volume of 495 pages, illustrated. Philadelphia and London: W. B. Saunders & Company, 1901. Cloth, $3.00 net.

This book is intended to meet the needs of students of medicine in the acquirement of those principles upon which modern hygienic practices are based, and to aid physicians and health officers in familiarizing themselves with the advances made in

hygiene and sanitation in recent years. The book is based on the most recent discoveries, represents the practical advances made in the science of hygiene up-to-date.

Among the important subjects considered are Ventilation, Heating, Water and Water Supplies, Disposal of Sewage and Garbage, Food and Diet, Exercises, Clothing, Personal Hygiene, Industral Hygiene School Hygiene, Military and Naval Hygiene, Habitations, Vital Statistics, Disinfection, Quarantine, etc. The idea of the book is to give the reader a clear understanding of the general priciples of this broad subject. The rapid strides made in our knowledge of the entire subject has rendered such a book, reflecting the more recent discoveries, a necessity to physicians and students of medicine.

A Handbook of Materia Medica, Pharmacy and Therapeutics, including the Physiological Action of Drugs, the Special Therapeutics of Disease, Official and Practical Pharmacy, and minute directions for Prescription Writing, by Sam'l O. L. Potter, A.M., M.D., M.R.C.P., Lond. Eighth Edition Revised and Enlarged. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut St. 1901.

This work embraces in a single volume the Essentials of Practical Materia Medica and Therapeutics. While it is, to some extent, a compilation, as all books of this class must be, there will be found in its pages much original matter derived from the writers own experience in professional life. The arrangement of the volume is quite unique—a modified alphabetical plan has been adopted, by which the advantages of the alphabetical order might be retained, while permitting the grouping together of agents which are closely related, physiologically and therapeutically, under the title of the principal member of the class—the chief as it were of that particular clan. I like the author's style very much in describing an important drug. He first gives its physical properties and chemical constituents, then its preparations are given in the official language of the pharmacopia. If there are any unofficial preparations these are mentioned and all the compounds into which it enters are enumerated. Next the physiological action is taken up; then the action of an ordinary dose; then that of small doses continued, and finally those from a toxic dose. These are followed by a brief account of its antagonists, antidotes and incompatibles, and a concise summary of its therapeutical application closes the article. Every article and preparation comprised in the last U. S. Pharmocœpia is fully noticed. We can conceive of no better method than the one the author has adopted.

The second part of the book is devoted to pharmacy. In this portion prescription writing has received special attention.

In the third part the subject of Special Therapeutics is treated of elaborately in the form of an alphabetically arranged Index to the treatment of diseases. The Appendix contains numerous tables, comprising diagnostic hints, Latin terms and phrases, &c. The Index has received special attention. The term official is used instead of officinal.

In this, the eighth edition of this work, in the section on Materia Medica, twelve articles have been rewritten, and thirty-eight new articles have been inserted. Many new articles also appear in the section on Therapeutics.

For completeness of arrangement, elegant diction, handsome binding, neat printing, we know of no work superior to Potter's. We cannot commend it too highly.

A Short Introduction to the Literature of the Bible. By Richard G. Moulton, M.A. (Camb.), Ph. D. (Penna.) Professor of Literature (in English) in the University of Chicago; Late Lecturer in Literature to Cambridge University (Extension) and to the London and the American Societies for the Extension of University Teaching; Author of "The Literary Study of the Bible," etc.; Editor of "The Modern Reader's Bible." A handsome volume, Cloth, Blue and Gold, with gilt top, viii, 374 pages. Uncut edges. Retail Price, $1.00. D. C. Heath & Co., Publishers, Boston, New York, Chicago, and London.

The present work is addressed to the general reader, whether more or less cultured; it avoids technicalities, and treats the matter of the Bible, approaching this from the literary side. The author says that the one main thing to do with the Bible is to read it. The author has produced quite a unique and interesting little work.

Practical Treatise on Diseases of the Skin. By John V. Shoemaker, M.D., L.L.D. Fourth Edition, Revised and enlarged, with Chromogravure Plates and other illustrations. New York. D. Appleton & Co., 1901.

This is the fourth edition of this work, has been revised and modified in correspondence to the advances of the last three years in the sphere of dematology. We feel sure this work will meet with the appreciation and success the other earlier editions have

had. This work has been thoroughly revised so as to bring this branch of medical science up to date.

The information to be found in this work is sound and reliable, the text is good, while the plates and woodcuts are clear and interesting. Under the section on *Exudations* the author places Rubeola, Variola, Scarlatina, Varicella and Vacinnia; also Chrancroid and Syphilis in its various manifestations. Each section has been fully and concisely treated. The writer believes in being concise, paying but little reference to the extensive literature of the affections of which it treats. Something over 100 pages are devoted to an excellent Formulary, giving many formulæ for the different skin affections. We like this arrangement and it adds much to the value of the book The work is beautifully printed, substantially bound and is very creditable to the publishers. The knowledge to be gained by a careful perusal of this work will cause it to be placed as a valuable book of reference to the specialist as well as the general practitioner.

The Acute Contagious Diseases of Childhood, by Marcus P. Hatfield, A. M., M. D. Chicago, G. P. Engelhard & Co., 1901.

This little book treats of the common diseases of childhood, such as scarlet fever, measles, whooping cough, Parotitis, variola, la grippe etc. The author describes these diseasea in a succinct, clear manner. He gives their Synonyms, Definition, History, Etiology, Pathology, Symptoms, Diagnosis, Prognosis and Treatment.

Upon the subjects treated the book fills a needed want. It is a nice little volume and worthy of reading and study,

Transactions of the Medical Association of Georgia. Fifty-second Annual Session, 1901. Atlanta, Ga. Printed by the Association. 1901.

In a neat binding, printed in clear type, on clean white paper, these transactions comes to us from year to year. It is one of the neatest volumes that comes to our table The matter it contains is of a high class and much care and deliberation is taken in its preparation. The proceedings are well reported and the papers found in the transactions are from the leading medical men in Georgia. A great many papers appear in this issue, thus showing the progress and enthusiasm taken in the meeting by its members. This is encouraging and we are always glad to note such. James B. Baird is President, and Louis H. Jones is Secretary and Treasurer.

The Niagara Book. By W. D. Harvells, Mark Twain, Prof. Nathaniel S. Shaler, and others, New and Revised edition. New York. Doubleday, Page & Co. 1901.

This book affords interesting reading. Everybody has heard of Niagara Falls, all have not seen it. This book gives a clear description of what it really is. It tells you what to see when you go there. The dramatic incidents that have taken place there are numerous, and some are very thrilling. At the close of the volume a few pages are are devoted to a sketch of Buffalo. The illustrations are many and most excellent. The volume is a very desirable one to have in your library.

LITERARY NOTES.

The November Forum opens with a timety character sketch of "Theodore Roosevelt," from the pen of A. Maurice Low. It is followed by a paper, "Preserving a State's Honor," in which Willard Saulsbury explains how it has come to pass that Deleware is at present without representation in the United States Senate. "Sugar and the New Colonies" is the title of an article by Charles A. Crampton on the economic significance of our recent expansion. Hon. Martin Dodge, writing on "The Government and Good Roads," reports what has been done, by the Washington Office of which he is Director, for the improvement of the highways in various parts of the country. Karl Blind, who himself took in the organization of the Sicilian insurrrection of 1860, reveals a page of its inner history in an article on "Crispi and Italian Unity." Price Collier contrasts "The Ethics of Ancient and Modern Athletics." President C. F. Thwing discusses the respective merits of "The Small College and the Large." Hon. Charles Denby, a former minister to Peking, contributes a description of the peculiar methods of "Agriculture in China." "The Political and Commercial Future of Asia" is forecasted by W. C. Jameson Reid. Walter S. Allen argues against the imposition of "Taxes on Street Railway Franchises." Preferences and the Bankruptcy Law" is the topic of a paper by Harold Remington. In the concluding articles S. P. Verner writes optimistically, not to say enthusiastically, of "The Development of Africa."

The November Review of Reviews devote special attention to the municipal campaign in New York City. Besides the discussion of the issue, illustrated by seve-

ral pages of telling cartoons, there are brief sketches of the opposing candidates for the mayoralty, Seth Low and Edward M. Shepard, writtenf respectively, by Dr. James H. Canfield and Mr George Foster Peabody, together with a summary of the existing political situation in New York from the pen of Dr. Milo Roy Maltbie. These articles, taken together. make intelligible to the outsider the peculiar conditions which at the present juncture confront the New York voter. The situation in Philidelphia, which is also regarded by the reform element as an extremely grave one, is described by Mr. Clinton Rogers Woodruff.

The November number of Scribnor's Magazine contains the opening chapters of Mr. F.Hopkinson Smith's longest and most important story, "The Fortunes of Oliver Horn." In dealing with the career of a young artist who comes to New York from the South to seek fame the author has chosen a sympathetic hero and drawn upon his own long and intimate asssociation with the artistic and literary development of the city; gives a most attractive impression of the artistic atmosphere in which the chief characters move. The whole story is characterized by a sense of refined humor and there are many of the author's well-known passages of phathos and wholesome human sentiment that have contributed so much to the wide popularity of his previous works. Each instalment will contain an illustration by Walter Appleton Clark.

Arthur Foley Winnington-Ingram, Lord Bishop of London, contributes an interesting paper to the November Cosmopolitan on "The Overcrowding of Great Cities and Remedies for It." Apropos of the discussion of the invasion of England by Americans, Edmund Gosse furnishes in the same number an essay scoring Englishmen for their narrowness of intellect. Incidentally he has a hit at American intellectual life in the twentieth century.

ABSTRACTS of the Leading Articles of the Month.

Burns.

Burns, according to Griffith, (Journal American Medical Association) may be divided into two degrees of severity, the first class involving the skin only and the second including all others. The pathology of these is that of inflammation of the part locally affected. Early death and internal complications are due to direct action of heat, with fragmentation and vital change in the blood corpuscles. Later effects are due to infections taking place from the burned area. The granulations during the healing of burns are the determining factor in the amount of contraction and deformity. The greater the friction caused by irritation of any source, the larger the granulations, the greater the amount of connective tissue and the contraction. The local treatment from the earliest times has been along the lines of prevention of irritation, but the late advances in wound treatment have not been followed. The burned wound should be cleansed with the removal of as much burned, dead tissue as possible; the thoroughness with which this is done will determine the presence or absence of infection. Hydrogen dioxid to wash away the debris and render aseptic the denuded parts is the best antiseptic at our command. Rubber tissue in strips should be laid on the wound to prevent contract with absorbent dressing. The use of splints to secure relaxation and retention in obtaining rest for a burned part is of great importance, and is as much indicated in this form of injury as in fractures. The internal treatment is stimulative until reaction from shock has taken place, when it becomes supportive. Opium fills the indications for pain, internal inflammation, and diarrhea. The bowels and kidneys should be continually kept open, but enemas only should be employed.

A Handy Device in the Treatment of Opium Narcosis.

Dr. Syne, in the Virginia Medical Semi-Monthly, says tickling acts almost as a specific in opium narcosis when the reflexes are not entirely lost. It acts like a charm, not only awakening, but angering nearly to the point of fighting. Its advantages are, the doctor has it handy; wide range of application; simplicity; leaves no marks of violence and is effective.

Chancre of Tonsil.

S. G. Dabney M.D., Professor Ophthalmology and Clinical Professor Otology and Laryngology, Hospital College of Medicine, Louisville, Kentucky, in a paper on chancre of the tonsil, published in New York Medical Times, says:

Case I.—Gentleman, 25 years of age, complained of sore throat of a few days duration. Discomfort was confined to the right side; there was a feeling of soreness and stiffness on this side and decided pain in swallowing.

On the posterior part of the right tonsil there was a well defined ulcer, the size of a three-cent piece and covered with a grayish secretion.

Malignant disease and tuberculosis were excluded by the local appearance and the fine general health. Syphilis was suspected. The case was treated expectantly.

In a week or two there was an enlargement of the cervical lymphatics and about four weeks after his first visit, the glands above and a little to the inner side of the elbows became enlarged and tender. At the same time a slight eruption appeared on the brow, mostly near and in the scalp. Diagnosis of syphilis was confirmed by genito-urinary specialist and ulcer of the tonsil agreed to be chancre.

On stating this opinion to the patient he remarked that he had been in the habit of smoking his room-mate's pipe and that the room-mate had been under treatment for syphilis for some months.

Case II.—Young lady, 17 years of age, rather pale and flabby in appearance and with a large swelling on one side of her neck (enlarged lymphatic glands).

Family physician with whom I saw the case in consultation had been called five weeks previously to see a large ulcer on her left tonsil. This was soon followed by enlargement of the glands at the angle of the jaw attended by slight rise of temperature.

The ulcer had not improved under treatment.

When I saw it, it involved the whole of the surface of the left tonsil, was rather deep and ragged and was covered with a thick secretion.

Syphilis and tuberculosis were both thought possible. Microscopic examination was negative. Mercurial treatment was followed by rapid improvement and cure.

It was ascertained that this young lady was receiving attention from a youth, then under treatment for acute syphilis.

There is a possibility that the lesion was tertiary but her physician who had frequently examined her throughout her life had never before seen a symptom to indicate this disease.

In general it is wiser here as elsewhere to wait for secondary symptoms before making a positive diagnosis and beginning a constitutional treatment but in this case the distress was so decided as to require prompt relief.

Cancer of the Intestine.

The history of the majority of patients who are subjects of cancer of the intestine is a most unsatisfactory one, and seldom redounds to the credit of medical science.

Fred B. Lund, in Boston Medical and Surgical Journal, is of the opinion that cancer of the intestine occurs most commonly in the fourth to the sixth decade of life, and is by far the commonest cause of chronic intestinal obstruction. It is about three times commoner in males than in females. It not infrequently occurs in the third decade, however, and, as is the case with cancer, is constantly being found in younger patients than we have a right to expect it. The large intestine is almost invariably the seat of the disease. The sigmoid flexure and the cecum are the commonest sites, the transverse colon coming next. As regards the indication for an operation in cancer of the intestine he says that an operation is indicated absolutely in all cases in which a tumor is suspected of being a cancer of the intestine after careful eliminative diagnosis.

Operation is indicated where the symptoms point to a probability of stenosis of the bowel, whether a tumor is palpable or not.

Exploratory operation is indicated whenever vague intestinal symptoms associated with loss of weight in persons past middle life lead to the suspicion of intestinal cancer.

Exception should be made of cases of general metastases of the peritoneum, cancer of the liver, etc., in which event no radical operation can be proposed, but all operative measures must be directed to palliation.

With regard to the nature of the operation, that must be determined at the time in accordance with the nature of the individual case, and is not a question for elaboration in this paper. Suffice it to says that excision of the growth with immediate union of the ends of the bowel is the ideal to be sought. Intestinal anastomosis and enterostomy are merely palliative measures to be undertaken where the former is impracticable. The constant improvement which is being made in the technique of enterectomy promises an improvement in results.

Contentment.

In this busy, hustling world where selfishness, enviousness, animosities and imoralities of all kinds are iminant features, it is hard for one to be contented. In the July number of *Mind*, Stanton Kirkham Daviet writes:

Oh, happy day for him who gives up striving to be richer, wiser, more clever than his fellows, and settles down content to be himself! And when abates the fever

of posession and he perceives that the riches of the rich, the joy of the happy, and the strength of the strong are his as well—then indeed for him has the millennium dawned. Then shines the sun for him; for him blooms the rose; for him the waters murmur and the winds sigh in the forest, or croons to the rustling corn. He shares the speed of the trout and song of the wren. He welcomes the souls that are coming and bids God-speed to the souls that are parting. Alone on the mountain or one of the crowd, everywhere is he in touch with the heart of humanity. All joys; all sorrows are his to assuage. Child is he with childhood everywher. To him flow the love and heroism of the world; for he has no longer a private and particular life. His bark has sunk to another sea—sails now on the serene and smiling waters of the Universal.

Cesarean Section versus Craniotomy.

A difficult labor is a trial through which all of us have to pass as we journey along our medical pathway.

J. W. Andrews, considering this subject in the St. Paul Medical Journal, says that craniotomy on the living fetus is very rarely justifiable, unless the choice of the mother to sacrifice the life of her unborn child, rather than subject her own life to a slight risk, renders it justifiable. Symphysiotomy is more difficult to perform, and attended with about as great mortality as cesarean section. Patients convalesce from cesarean section more rapidly than they do from symphysiotomy. Cesarean section is not a very difficult operation, and under the guidance of the principle of modern surgery has not a high mortality. Craniotomy is at best an unscientific, clumsy operation. When a full term fetus cannot with the aid of forceps be born with the aid per vias naturales then cesarean section should be the operation of choice.

The Cure of Enurosis.

Philip S. Barbour, in the Therapeutic Gazette, offers some good suggestions for the cure of this disease:

Cases of enurosis are those which usually without any assignable reason wet the bed at night. This is one of the lesser ailments of children that produces more discomfort than many more serious diseases. The writer says the urine is offensive in odor and frequently alkaline in reaction. It stains the night garments or bedding brown and rots the bedding very rapidly. The great frequency of enurosis and the absence of any determinable cause in most cases have led us to infer that the most frequent cause has not been ascertained, and especially that it is not a neurosis only.

Belladona, atropine and strychnine have been the leading drugs used in this trouble for many years. Very often these fail to ameliorate this trouble to any degree. Of course, such evident causes as worms, bolanitis, phimosis, highly acid or too concentrated urine, vesical calculus, congenitally small bladder, should receive their appropriate treatment. Punishment never does any good. The writer states that on several occasions and with remarkably beneficial effects he has used boric acid and salol in combination for this trouble. I agree with the writer fully. This has been my treatment for the past few years and I have always relieved the sufferer. This is a very simple treatment and in addition it is void of danger and easy of administration, and can be continued indefinitely where there is no diseased conditions in the kidney.

Factors Influencing the Severity of Syphilis.

Bernard Wolf, in the Atlanta Journal–Record of Medicine, shows that with the proper treatment there occurs a permanent disappearance of the symptoms of this disease, whereas on the other hand, the proper treatment is instituted, but instead of prompt removal of the evidences of the disease, the lesions are stubborn and persistently recurrent. We have two cases, one mild and submissive, the other severe and rebellious. The question which has never been satisfactorily settled is, does it reside in the quality of the infecting agent or the nature of the soil which receives it? The writer states that we have among us, it seems, a refutation of this doctrine and a highly valuable proof of the influence of the soil as modified by race upon the conduct of the disease.

In the pure-blooded negro, in whom syphilis is exceedingly frequent, this disease runs so mild a course, in spite of incomplete treatment or no treatment at all, as to be practically self-limiting. The writer having sketched the arguments on both sides offers the following personal conclusions:

The factors which influence the severity of syphilis reside both in the seed and soil, the individual and the infecting material.

Syphilis varies in type with the nature of the soil and the quantity of the virus.

The nature of the soil depends upon the physical condition of the individual, his health, race, age and sex. The quality of the virus upon the dilution from frequent transmission and attenuation by mercurial treatment continuously or intermittently

carried out along the links of the antecedent chain.

Attenuated virus and healthy soil mean abortive or benign syphyilis, while with the possible exception of racial immunity or resistance, depraved soil and unmodified virus mean malignant syphilis.

General Anesthesia in Operation upon the Nose and Throat—Nitrous Oxid, Chloroform and Ether.

F. E. Hopkins, M. D. Springfield, Mass. (Abstract of a paper read before the American Laryngological Association at its Twenty-third Congress, New Haven, Conn., May 27, 28, and 29, 1901)

Nitrous Oxide Gas is not gennerally used by surgeons in this country, though largely employed in England. The more common use of this agent in England may be due to a reaction from chloroform. Ether never has been used as freely as with us, and when it was finally determined that chloroform involved too great risk, attention was turned to nitrous oxid gas well as to ether. From lack of personal experience I have no right to pass judgement upon the use of gas, though it would seem that the time of unconsciousnes is too short to permit of thorough clearing of naso-pharynx in some cases. The time which elapse from the removal of the face piece to the recovery of consciousness may vary from thirty seconds to one minute. Nitrous oxid is unirritating, pleasant to take, quick in its action; recovery from it is rapid, it is quite safe, and can be given with the patient in a sitting position. It, however, posseses decided disadvantages. The duration of anesthesia (especially children) is very short, and a good deal of muscular spasm is produced, especially in young subjects. The duration of the anesthesia is always uncertain, and with hemorrhages going on from the pharynx it is dangerous to reapply the inhaler. In addition the deed, gasping insprations which occur on the return of consciousntss introduce another element of risk; namely, that the blood or detached fragments of adenoids may be drawn into the pharynx.

In view of the above mentioned facts, nitrous oxid alone is not adapted as a routine anesthetic for post-nasal adenoids.

Chloroform—The danger attending the administration of chloroform to patients with adenoids was so forcibly presented to this association by Dr. Hinkle in 1898 that it is unnecessary at this time to do more than allude to some of the strong points he then made. He quoted the observations of the Vienna pathologists, who showed that sufferers from adenoids frequently belong to an abnormal constitutional type which renders them peculiarly susceptible to chloroform narcosis—the habitus lymphaticus, so called. You will recall that he referred to eighteen cases of death from chloroform given to children who were to be operated upon for the removal of tonsils and adenoids, and well says that the general use of chloroform in these operations is inadmissible. Death from chloroform often occurs with little warning and sometimes at the beginning of anesthesia. One is impressed by the fact that all the advocates of the use of chloroform insist that it must be given by a careful and trained anesthetist, whose one care must be the watching of the patient—an admission of the danger involved.

For some time statements have appeared regarding the danger of giving chloroform to children. This is so contrary to the long accepted belief as to merit attention. Dr. John A. Wyteh has said, in children ether is in general the safer anesthetic. He had been taught that chloroform was the better anesthetic in this class of cases, but he had learned that in children under twelve years of age chlorofnrm was not so safe as ether. He had seen death occur in a child of ten years without a single danger signal, and when not more than 1 gr. of chloroform had been administered by an expert. Chloroform was especially dangerous in children who were poorly nourished or weakened by any dyscrasia. Particular care was necessary when the child struggled and made deep and rapid inspirations. W. I. McCardie and C. F. Marshall, in considering the main physiological differences between the child and the adult which concerns the induction of anesthesia, lay stress upon the fact that the administration of anesthetics, especially chloroform, is by no means so free from danger in childhood as is generally supposed.

Chloroform is particularly dangerous, because, even after its discontinuance, there is a residual quantity of vapor in the air passages. As soon as bleeding occurs respiration is impaired, this residual chloroform is absorbed and acts as an overdose, and circulatory depression evidenced by pallor and absence of the pulse and results the breathing in these instances being shallow and gasping. Chloroform during its administration has so many more possiblities of danger than ether, and serious conditions arise with so little warning, and so many fatalities have been charged against it that the surgeon who used it must offer his own justification.

Ether—Is the only anesthetic with which I have had any considerable experi-

ence. While in a good many cases conditions have arisen which for a time seemed alarming, because of collapse due to the anesthetic, yet there always seemed something left to work upon, and efforts towards restoring the patient were successful. I have had no serious after effects from ether, and it is is qnite fair to say that the inference deducible from this is not wholly that of limited experience. I have not had the advantage of being able to call upon a trained anesthetist, but have made it a rule to ask the physician sending me the patient to give the ether. It is not necessary here to defend or explain this rule; it is sufficient to state the fact. This has given me quite a varied experience in methods of administering ether. I have seen such tact and skill used that the little patient seemed hypnotized and inhaled the ether without the slighest struggle or excitement. One man etherized three patients with the contents of one small can, another wasted four such cans, and even then the patient was not ready for operation. On one occasion I waited forty-five minutes for the doctor to anesthetize the child. Under all these varying conditions the patient was safe, admitiing the element of safety with ether, we have yet to object to the almost invariable resistance which arouses on the part of the patient at the beginning, and the distressing nausea which so often follows its administration. An anesthetic is desired which will give the safety of ether and eliminate its unpleasant features.

I wish in passing to mention a methbd of giving ether, which, could it be safely and easily followed, would be a great convenience in operations about the face and throat. The method is that of rectal etherization. To quote from Buxton, this form of etherization was used as early as 1847. He has now used the method pretty extensively and finds it to answer admirably for operations about the mouth, nose and post. buccal cavities, for intra and extra-laryngeal operations, for staphylorrhapy and for operations for relief of empyema. For the removal of the tonge, for excision of the jaw or jaws, and for plastic operations about the face, the method gives greater facilities and freedom to the operator than any other plan he has tried.

Nitrous Oxid Followed by Ether—Nitrous oxid is almost an ideal agent for the production of anesthesia, though not for its maintenance. It is pleasant to inhale, rapid in action, free from irritating or stimulating effects, and is the safest anesthetic known. Used to precede ether, a form of anesthesia is obtained which is exceedingly satisfactory. The patient at the beginning is spared any knowledge of ether used, none being administered until unconsciousness is produced by the gas. There is no coughing, no chocking, no stage of excitement, and little or no mucus. When ether is begun it can be pushed to complete anesthesia within two or three minutes.

This method long used in England, has within a few years found much favor in this country. It is used in several of the hospitals in New york City as well as in the hospitals of other towns. Drs. Brown and Kelley, of Baltimore, after an experience with upward of 200 cases speak most enthusiastically of the method. They emphasize the following points: for the patient, the rapidity with which he or she becomes anesthetized, the freedom from all unpleasent symptoms during the process of anesthetization, and the distinct diminuation in the after symptoms, especially in regard to nausea; to the surgeon the great advantage is the shortening of time, to the anesthetizer the advantages are obviously a combination of both the preceeding.

Indications for the Operation in Gastric Ulcer.

The operative treatment of gastric ulcer is one of the leading questions considered and discussed by medical and surgical men. The limitations of medical treatment in dealing with this trouble, some disease is well recognized. The changes that have taken place in recent years in our knowledge of this subject have been mainly in the line of improved technique and consequently lessened danger from operative measures. There is no question in my mind but that quite often the question of operative interference in gastric ulcer has been postponed, not only until medical treatment has been long and evidently a failure, but even until the patient's condition has become desperate. In considering this subject principally from a surgical standpoint, Arthur L. Cabot, in Boston Medical and Surgical Journal, gives a condensed statement of the present indications for surgical treatment:

Acute hemorrhages should rarely be treated by operation; the results of interference have not been good, while the results of medical treatment have been satisfactory. When, however, a hemorrhage frequently repeats itself, even if severe in amount, it will demand operative treatment as soon as its recurrent character is plain.

Small, frequent hemorrhages, threatening anemia, give a clear indication for operation.

Perforation of the stomach, either acute with general peritonitis, or chronic with

surrounding adhesions and perigastritis, demands instant operation.

When an ulcer runs a chronic course with a strong tendency to recurrence, and gradually diminishes the patient's capacity for work and for the enjoyment of life, an operation is indicated, especially when the patient is so situated as to be dependent on his daily work for support and unable to closely regulate his diet.

Is Surgical Interference in Typhoid Perforation a Justifiable Procedure?

Dr. Armstead K. Tayloe, of Georgetown, S. C., read this paper at the last meeting of the Seaboard Medical Society, at Weldon, N. C. It is beautifully written and is full of valuable suggestions. The following is only a part of the paper:

As I roam into the literature of typhoid fever and find that perforation constitutes 11 per cent. of the causes of death in this fever, and knowing too, that a wide spread diversity of opinion exists regarding the propriety of a surgical procedure, I am prompted in the face of these facts to present this question, which I would otherwise approach with a great deal of reluctance, and I shall deem it the proudest work of my life, if my feeble efforts shall be in the slightest degree instrumental in bringing to a definite point the question under consideration. It is a question, my fellow-practitioners, which involves life itself. It is a question that heads the list of the many awful considerations which burden the mind of every conscientious physician, and it should, in my opinion, stand pre-eminent in the domain of modern surgery. I wish to remind you of the fact that typhoid fever is one of the most widely distributed of infectious diseases. It occurs in all climates, at any season of the year and at any period of life; and when we consider the thousands of people who die annually in the United States alone, of this trouble, you can understand, gentlemen, that it is a question of paramount importance, and as the guardians and protectors of the health and lives of the people, it behooves us to study in all of its various aspects, the most dangerous of the many complications of typhoid fever. It occurs in about two to three per cent. of all cases. It was found to have occurred in 5.7 per cent. of the two thousand autopsies on cases of typhoid fever made at the Munich Pathological Institute, and in 21.2 per cent. of the 64 autopsies made at the General Hospital. Of 685 cases (Osler) there were 34 (4.96 per cent.) with perforation. The 4,680 cases tabulated by Fitz, gives a mortality from perforation 6.58 per cent. The accident forms according to Merchison about 11 per cent. of the causes of death in typhoid fever. It occurs much more frequently in men than in women and in ratio of about 71 to 29 rarer in childhood than in adult life. Perforation seldom occurs in infants. It must ever be borne in mind, that even in mild cases there is danger of perforation, when there is absolutely nothing unusual in the symtomatology to cause the least anxiety. In the cases analyzed by Fitz, perforation was found in the ilium, in 81.3 per cent. in the large intestines, in 12.9 per cent. in the vermiform appendix, in 2.5 per cent., Meckel's diverticulum (4 cases out of 167) jejunun in 1.29 per cent. Having thus brought to your notice certain practical points, we are in a position to discuss the subject proper. Is surgical interference in typhoid perforation a justifiable procedure, or is it not? I believe the decision of this question should be wholly controlled by the absolute correctness of the diagnosis, the physical condition of the patient, the time at which the operation can be done, and last, but not least, the skill of the operator. In my opinion, it takes quite a clever diagnostician to arrive at positive conclusions, especially if the patient be unable to describe his feelings, and which it is very often the case. I hardly think there is any one symptom that is pathognomonic. (Leucocytosis is but by few considered). I believe by the aid of the microscope, coupled with the local and general symptoms and if the patient be able to describe his feelings, we can in nearly every instance, arrive at a positive diagnosis (of course a number of cases are diagnosed when the patient is absolutely unconscious). It is not an easy matter to differentiate between peritonitis with and without perforation, and I honestly believe that hundreds of lives are lost annually from perforation, which are credited to other causes by reason of an incorrect diagnosis. Peritonitis may result from the extension of inflammation from the ulcerating mucous surface to the peritonial layer of the intestine, without causing perforation, or it may be caused by the rupture into the peritonial cavity, of an abscess of some sort of the internal viscera, as the spleen, gall bladder, liver, urinary bladder, suppurating mesenteric glands, or even by an abscess of the belly walls. In such instances, diffuse septic peritonitis results, rapidly increasing in intensity, generally to a fatal termination. Dr. Pepper says he has known death to occur from general peritonitis, with abundant purulent and plastic exudation, as early as the 10th day, without perforation, and without any evidence to connect its origin with any particular

ulcer of the intestine. To operate for perforation during the presence of peritonitis, and in the absence of a lesion would not be a very serious mistake. But to be lead into errors by hemorrhage would subject your patient to a sad and absolutely unnecessary ordeal. Peritonitis, unless of a circumscribed nature, is a very fatal complication, whether it results from perforation of the bowels or extension of the inflammatory process, from the base of deep ulcers. While it is true that perforation is not inevitably fatal, still I fear that those cases in which recovery takes place are more of a surgical curiosity than they are of a frequent occurrence, and this should have no weight in rejecting an operable measure. Every successful case operated upon "is a life snatched from the grave," a localized peritonitis resulting from perforation, may produce only an abscess which may find exit through the bowel or externally, and recovery follow, or a very small perforation may be occluded, by false adhesion to the abdominal walls, or to the intestine itself. Matting together of the intestines may produce complete obstruction, though very rarely. Perforation is an accident that may occur at any period of the disease, and in the mildest cases, as previously stated. It has been known to occur as early as the 1st., 2nd and 3rd day, and late as the 6th and 7th week, the patient being out of bed and at work. Fitz' statistics go to show that it occurred in 3.6 per cent. between the ages of one to ten years, 23.8 per cent. between ten and twenty, 39.8 per cent. between twenty and thirty, 23.3 per cent. between thirty and forty, 7.2 per cent. between forty and fifty, 1.0 per cent. between fifty and sixty, 0.5 per cent. between sixty and seventy. The first and most prominent symptoms that are manifested after perforation occurs is a sudden attack of acute, sharp pain, generally on one side of the abdomen (preferably the right iliac region, or it may be diffuse). The severity of the pain varies greatly, probably dependent upon the location and character of the perforation. In the majority of cases, the pain is excruciating, causing the patient to feel faint; nausea and vomiting not infrequently present. The limbs are often drawn up to relax the abnormal muscles. The absence of liver dullness is a sign of much diagnostic value. By some it is thought to be rarely, if ever obliterated, as a result of perforation. My limited experience has induced me to think otherwise. It has certainly disappeared in one of my cases, where there was absolutely no doubt as to the correctness of my diagnosis, and to it I attach no little importance. Leucocytosis is considered confirmatory by some observers, however other complications will obscure this sign, but generally speaking it is the most reliable criticism to be governed by, especially when considered in connection with the abdominal symptoms. Perforation which occurs early in the attack is thought to be due to the separation of a slough, while that which occurs later, is probably the result of an extension of the ulcerative process to the visceral peritoneum. The opening through the intestine is usually single with clean cut edges, but the openings may be single or multiple, complete or incomplete. Fitz reports that there were in 167 cases; two perforations, in 19 cases; 5 perforations, in 3 cases; 4 perforations, in one case; several perforations, in 4 cases; 25 to 30 perforations, in 2 cases. It is impossible to recognize that a perforation is about to occur, so we should ever be on our guard and "in time of peace prepare for war." In my opinion perforation occurs earlier in the ambulatory form of typhoid than in any other (perhaps save one, and which is very rare, the Septicæmic form) and which I attribute to indiscriminate eating, and the same cause is accountable for many of the cases which occur during convalescence. I have recently met with a case of the ambulatory form of fever, in which the patient kept about until thirty-six (36) hours before death, when suddenly perforation took place and death occurred promptly. The patient was in the prime of life and in the flower of robust manhood. I am confident that he was ushered into a premature grave by eating barbacue.

As far back as 1884, Mikulicz successfully operated upon a case which he claims was caused by patient eating a piece of potato. Leyden, writing of typhoid fever in 1884, was the first to advocate a surgical operation for the relief of perforation of the bowel. A little later Mikulicz reported three (3) cases which he had treated with the knife. But to Lucke was left the crowning glory of being the first to report a case where there was absolutely no doubt as to the diagnosis. About the same time, or a little later, Bontecou operated for the same trouble. I have collected 93 cases from the literature that have been operated upon with twenty-two recoveries (per cent. I am unable to give age, sex, etc. I will now report five cases of the most desperate kind, showing the brilliant result achieved by operation: Ferraresi (in 1894) Intestine resected, irrigation, gauze drainage, recovery. W. Hill (in 1895) resection and impending perforation sutured. Button avoided in 17 days. Recovery.

Geselevitch and Vanech (in 1895) 12 inches of bowel resected. Death on the 7th day of Catarrhal pneumonia.

Geselevitch and Vanech (in 1896) 12 inches of bowel resected, abdominal wound not closed. Death 8 days after from exhaustion.

Geselevitch and Vanech (in 1896) excision and stitches, abdominal wound not closed. Death 3 days after.

It is absolutely necessary to look for and suture all impending perforation, or the operation will have been incomplete, and in all probability unsuccessful. I hardly think we are justified in reopening the abdomen, but individual case must decide.

Dr. Hugh M. Taylor, one of the modern pioneer abdominal surgeons of the South, has operated five times with one recovery. The successful case was the only one operated upon during first twelve hours after perforation. The others were moribund at time operation was undertaken. Davis, in the University Medical Magazine, reports three cases in which operations were performed for supposed perforation. A single small perforation with free pus in the peritonial cavity was found in one patient who recovered. In a second patient death followed the suture of the perforations, while in a third no perforations were found, and the patient recovered from the operation. He goes on to say that a decided and sudden increase in the abdominal systems, especially pain, associated with an abrupt fall of temperature is diagnostic of perforation. Leucocytosis is a confirmatory sign. Hemorrhage is accompanied with a sudden fall of temperature, but not by a sudden increase of abdominal symptoms. Dullness in the right iliac region is not to be expected in cases of perforation. Localized impairment of resonance may be due to free abdominal fluid. Change of position causes it to disappear. Localized pain and dullness may be due to a plastic peritonitis around the site of the perforation. This may be observed perhaps in one case in ten (10) possible one in five (5). He says that typoid fever patients when not in total collapse, bear operations much better than would be expected. He advises washing out the abdominal cavity with hot normal saline solution, even if no perforations exist, claiming that it improves the condition of the patient, at the time of operation, and to favorably influence the subsequent course of the disease. He opens the abdomen at McBurney's point, and not in the median line.

In conclusion, I shall briefly discuss what we have been over. In favor of Abdominal section, it may be said that a death rate of probably 100 per cent. in treatment, without operation justifies surgical interference. In face of the statistics of those cases operated upon, it is certainly a justifiable procedure. It is now well known that in a patient not exhausted, exploration of the abdominal cavity, under strict antiseptic precautions, in the early hour of perforation, does not add much to the gravity of the prognosis. "and what man has done, man can do," so if we are absolutely sure of our diagnosis, and can operate shortly after it occurred, inform the family at once, how dark and gloomy the chances for recovery are, and that an operation holds out the only practical hope for life. If they say operate, it is our duty to do so. If they decline, we have done our duty and our responsibilities cease. To-day, if we are smart enough to diagnose a case, and brave enough to operate, we are wrong, if we know the lesion exist, and we do not operate. We are wrong, and why? On account of the attitude of the Medical Profession, regarding the propriety of a surgical procedure. We stand in a truly critical position, as there are very, very few advocates of surgical interference, as compared to the very many who are not. It is a judge's first duty never to pronounce sentence in the most trifling case without hearing; so by way of illustration, I wish to say that it is a doctor's first duty to examine a patient carefully, and weigh the symptoms with the greatest of circumspection, before passing sentence. No case should be considered a non-operable one (except in the Septicæmic form) if seen in time, but many a case passes beyond an operable stage as a result of difficut diagnosis and an inadequacy of time to make the necessary arrangements for opening the belly, especially outside of a hospital. In face of the statistics which I have brought to your notice today, I ask you gentlemen of the Seaboard Medical Society, if we could be content with using the ice-bag and opiates, I ask you if we can in honor, or courage, intrust these cases to providence, why should we stand longer with folded arms? The profession must be imbued with its importance. The common people must be enlightened upon the subject, for further misunderstanding and estrangement should not exist. It's a last resort and the only hope for life. It can shed light, but not darkness. In my feeble opinion, the only hope of reducing the high mortality is with the knife, and unless you are prepared by strength and knowledge to use it, it will be like a brawney laborer's crowbar in the hands of a delicate child, a dangerous plaything. No competent man should surrender in the face of a difficulty

and danger involving life. Have courage. Be brave and earnest and linken your feelings into the undertaking, as that of a soldier entering the battlefield, and if your efforts are not crowned with success, you have a clear conscience and the consolation of knowing that you have done your duty to the best of your ability and judgment, and the only regret that can come to you is that your ability and judgment was not greater, and the world will honor and recognize you as a hero in your calling.

Cause of Rontgen-Ray Dermatitis.

We curtail from the British Medical Journal: Kienbock (Wien, Klin. Woch.) states that idiosyncracy to Rotengen-rays does not exist. To avoid unwished for erythema or dermatitis, it is necessary to know to what they are due. The view most generally accepted in Germany and Austria is that the skin is affected by the electrical discharges from the tube or the "electrical field" surrounding it, and not by the Rontgen-rays themselves. In a good "medium soft" tube, *i. e.*, where the tube is not highly evacuated or "hard," the current is not prevented passing between the electrodes, and almost all the electricity is converted into Rontgen-rays which gives a skiagraph with well-marked contrasts, and very little passes round outside the tube; if the vacuum is not complete enough, the current passes too easily between the electrodes and produces violet fluorescence, but no Rontgen-rays. Again, a too highly evacuated tube after a few minutes' use becomes "softer" and emits more x-rays, but afterwards, while disused, becomes even harder than before. Some form of tube in which the degree of vacuum can be regulated at will should therefore always be preferred. Kienbock's experience, both clinical and experimental, proves that cutaneous changes always result from the Rontgen-rays, and not from electrical dischrages. (1) Four patients were treated for hypertrichosis, sycosis,etc,. with rays from a highly evacuated tube. The changes produced were inconsiderable. A "medium soft" tube was substituted with a new patient, and also the same patient. On the eleventh to the fifth day such redness and swelling—with, in one case, pigmentation, and in the other ulceration—of the skin set in that the treatment was abandoned. (2) Several rabbits were subjected to rays from a "hard" tube on one flank and from a "soft" tube on the other. The "soft" tubes alone produced dermatitis and alopecia. India-rubber gloves which completely protect the hands from electrical discharges, are of no use in preventing dermatitis. As there is generally an incubation period which may extend to21 days, it is wrong, when applying the rays for therapeutic purposes, to wait for the first signs of a reaction before discontinuing the treatment. After three to five applications of the rays from a "soft" tube on successive days, a pause of two to three weeks should be made. Afterwards, when the effects of the treatment have passed off, or if no reaction is produced, the process may be repeated.

Medical Education.

Burrell calls attention in Journal American Medical Association to the value of experience, which, nevertheless, is not the only method of obtaining knowledge and can be supplanted in some measure by the student having a foundation firmly laid by scientific methods in laboratories for research work, hence the value of laboratories. The special practitioner will have his foundation laid in these, and carry the training he has there received to individual patients. The uses of the clinical laboratory are stated by Burrell as follows: 1. The habit which the student will form of examining clinical products in each individual patient as he presents himself. 2. The training of students to apply their abstract scientific knowledge to the concrete example of a patient. 3. The stimulus to acquire knowledge at first hand, which will not alone be felt in his laboratory work. 4. The impetus it will give to research. The writer also says that the compensation and the position of the teacher of medicine at present are not what they ought to be. He is obliged to give his time and attention 1, to his living 2, to his hospital work, 3, to his teaching. The matter will not be improved until the medical schools make a teaching position the principal object of a man's life. Burrell considers that the value of lectures, recitation, demonstration, etc., is still undetermined. There are certain subjects that are always best presented by lectures, and clinics will always be of great advantage. Extramural teaching should be carefully tried in all large centers of population. Graduate instruction at the present is not sufficiently scientific. The doctor goes to get therapeutic tips, the latest dodges in operative technique and the reputation of having the latest scientific facts. The graduate instruction should be planned so that real knowledge can be obtained in the shortest possible time. The function of the modern medical school is that of a university of medicine, and should fit the students for the practice of specialties and biologic work as well as for general practice. What the curriculum should be is

yet a question. He gives a diagrammatic showing and criticism of the curriculums in four leading schools, not, however, designating the institutions. He summarizes that every school of medicine should establish its curriculum not depending on the wishes of the head of each department, but planned for the good of the student, and should establish in each of its departments the minimum required course for the average student. During the fourth year of instruction of work should be essentially elective and optional in order that students can prepare themselves for the special lines they are to be engaged in. Improvement in the method of instruction can best be secured by active competition. This can be obtained by the medical schools of the country adopting a standard of minimum required work. At what period this minimum required work should cease is open to argument.

Primary Cancer of the Gall-bladder and Bile Ducts.

In 1894 Delano Ames, writing on this subject, said:

"As carcinoma of the gallbladder is usually not discovered until so far advanced that such noticeable symptoms as jaundice, emaciation and pain have set in, we rarely have an opportunity to study this condition in the early stages in those who may have died from some intercurrent disease." Musser, who analyzed 100 cases of primary cancer of the gallbladder and 18 cases of like disease of the bile-ducts, asserts of the latter condition that "No general symptoms arise to lead one to suspect the presence of a malignant tumor, or they are masked by jaundice."

These observations are adducted merely to show that, notwithstanding the rapid increase in knowledge of gallbladder and bile-duct pathology, very little advance has been made in our ability to distinguish these conditions in their incipiency, and this is due to the fact that the symptomatology upon which diagnosis must be based is too obscure if not entirely wanting. In those cases in which physical signs and morbid states agree and a diagnosis can be made, the patient is usually already too far advanced with the disease to admit of helpful intervention.

W. P. Manton in American Medicine concluding his article says:

Although primary cancer of the gallbladder and bile-ducts is rare, recent investigations go to show that it is not so uncommon as generally supposed.

As a rule, the onset of the condition is insidious; there are no symptoms developed at an early stage of the disease in either locality, with which we are at present acquainted, which will permit of a positive diagnosis being made. When this is possible the disease has already advanced beyond the helpful intervention of surgery. Fever, having been observed in so many other conditions of the liver and adjacent organs, it is of little or no value as an aid to diagnosis. This same may be said of blood examination. Emaciation is frequently absent, and the patient may remain in apparently good health until toward the termination of the disease. The absence of maignant disease elsewhere has no diagnostic significance.

The only symptom which may perhaps prove of service in forming a provisional diagnosis of gallbladder and bile-duct malignancy seems to be of gastric origin. In two of the cases above reported, and in many cases found recorded in the literature of the subject, disorder of the stomach preceded the local symptoms of cancer.

Further investigation along this line is desirable, and all protracted disorders of the stomach which cannot be positively referred to other causes should be viewed with suspicion as a possible indication of beginning malignance in the gallbladder or bile-ducts.

The Knot within the Lumen in Intestinal Surgery.

The history of the location of the knot in intestinal surgery might be said to be the history of that branch of surgery itself, for it would appear, that every thing has hinged on the knot and its location. Quite a lengthy and well illustrated article appears in the Journal of the American Medical Association concerning this subject by F. Gregory Connell. He concludes as follows:

1. Yielding and leakage are the most frequent causes of failure in enterorrhaphy.
2. To include all coats of the bowel wall, removes the danger of stitch-yielding.
3. To place the knot within the lumen, diminishes the danger of capillarity.
4. The square-loop stitch is more reliable than the circular-loop stitch of Maunsell.
5. The relative thickness of the needle, and the submucosa, surrounds the procedure of "penetration without perforation" with great uncertainty.
6. To fail to include the submucosa, leaves a weak stitch.
7. To perforate the submucosa is practically to open into the lumen.
8. To penetrate into the submucosa of the duodenum, is practically to perforate the submucosa.

9. It is not only possible, but practical and advantageous, to place all the knots of an enterorrhaphy within the lumen.

10. The ideal location for the knot is outside of the peritoneal cavity.

Nephritis without Albuminuria.

Dr. W. P. Herringham (Lancet) says: A boy, aged nearly 4, was admitted to hospital for diarrhœa and vomiting on March 29th. He was supposed to be cured and was sent to a convalescent home. The urine was thrice examined and found normal. There was no previous history of scarlet fever. From May 5th to July 14th he was in good health at the convalescent home, and was under constant medical supervision. There was no case of scarlet fever at the home. On July 14th dropsy began in the feet and spread to the legs and face. The urine was not albuminous. The patient was sent back to the hospital, and for the next six weeks he looked a typical picture of sub-acute nephritis, but there was never albumin in the urine, which was exceedingly scanty. No formed elements were ever visible under the microscope. On August 29th he died.

At the necropsy the viscera, including the kidness, appeared natural. Microscopic examination showed cloudy swelling in a few of the convoluted tubss and albuminous plugs in many; in a few of the collecting tubes similar plugs were found. An exudation, apparently of serum or albumin, was found in almost all the glomeruli, and there may have been some cellular increase in the capillary tuft.

As the child was under hospital observation for 3½ months before the onset, scarlet fever may be excluded. The writer believes the case to be unique. Several cases have been recorded of nephritis without albuminuria following scarlet fever. The existence of this condition in the absence of scarlatina has been suspected, but never proved by necropsy.

On the Causation and Treatment of Profuse Epistaxis in People beyond Middle Age.

George Coats (The Lancet) gives abstracts of histories of several cases, in all of which the sequence of events leading up to the hæmorrhage was the same, namely: (1) Long-continued arterial pressure; (2) some sudden cardiac failure; (3) over-filling of the whole venous system. the weakened heart not being sufficiently able to empty the engorged veins against the high pressure in the arterial system due to contracted arterioles; (4) leakage from an over-filled vein. The most scientific and satisfactory treatment of these cases of epistaxis, and by analogy of the other forms of passive venous hæmorrhage, is to empty the over-filled veins. As long as they are enormously distended with blood, the hœmorrhage must continue unless direct mechanical means are used, and if one nostril be plugged, the epistaxis is apt to start from the other. If, on the contrary, we can relax the walls of the arteries and help the enfeebled heart to do its work, it will soon empty the overfilled veins. But, as a rule, this cannot be done by giving heart tonics at first. Immediate treatment must be direct to the capillaries and small arteries, as the real cause of the epistaxis lies there, not in the nose. Nitroglycerin is quite effective, nitrite of amyl might be more so, but one of the more quickly acting nitrites should be used at first; afterward one of the more slowly acting, as erythrol, tetranitrate, or possibly even thyroid tabloids, might do as well. When the capillaries and arterioles are dilated and pevious, then comes the time for strychnine or strophanthus. In spite of everything, plugging may have to be resorted to in some cases, but in most of them the hæmorrhage can be stopped without resort to this procedure, which is always most uncomfortable to the patient and sometimes even dangerous.

Complete Transverse Septum of the Vagina Impending Delivery: Uretheral Coitus.

E. Rumley-Dawson. L.R.C.P., M.R.C.S., (Lancet) says:—A primipara, aged 21, was in strong labour. On examination the index finger unintentionally and painlessly passed into the urethra, which was very dilated. The vaginal orifice was small, the finger passed less than an inch and met with an obstruction which felt like a large bag of water. No cervix or fornices could be found, Per vaginam the head could be felt making the obstruction bulge. By rectovaginal examination a rather thick transverse septum could be felt between the fingers. It could also be felt per urethram. It was about ¼ inch thick at the insertion into the vaginal wall and became thin towards the centre. The septum was incised with a knife between the pains, and the incision was enlarged by tearing with the finger. Delivery was then easy.

At 6 the patient had scarlatina, but the attack was not known to be unusual. Sexual intercourse had from the first been difficult, and after several months impossible. Later there was less difficulty, as the urethra gradually dilated. There had

been frequency of micturition, but not incontinence of urine.

Cases of transverse septum of the vagina are rare. Those in which there is uretheral coitus and obstruction to labour are still rarer. Transverse vaginal septa are either congenital or acquired—i.e., inflammatory in origin. The present one was evidently congenital. Dr. J. Cullingworth (Lancet) has recorded two cases. In one, that of a widow aged 38, the condition was due to inflammation of the genital organs at the age of 12. There was an opening in the "thin and flexible septum," large enough to admit a uterine sound. The patient had been married nearly 6 years, had never been pregnant, and was "not aware of any difficulty in her martial relation." In the second case the septum was evidently congenital. It obstructed labour. There was always slight leucorrhœa, and during the previous years pain was excessive on the first day of the periods. Under ether an opening of the size of the urethra was found in the septum which was dilated and torn through. Dr. C. R. Prance (Lancet) has recorded a case of transverse vaginal septum. The patient was sterile; she soon became pregnant after the opening in the septum (of the size of a pin-hole only) was enlarged and the septum destroyed. Dr. Cullingworth says that the septum usually consists of "a thin. not very vascular, and easily lacerable membrane."

These cases of vaginal septa are distinct from those of cicatricial contraction or occlusion of the vagina. The latter have led to Cæsarean section when the vagina has been so obliterated as to prevent delivery.

Concerning dilatation of the urethra, the result of uretheral coitus, most of the recorded cases have been instances of *absent vagina*. Dr. T. A. Emmet ("Vesico-Vaginal Fistula") has recorded two cases of coitus per urethram. In both the uterus and vagina were absent. The urine was easily retained in spite of the dilated urethra, "which in one was so patulous that the index finger could be introduced without difficulty" while "in connexion, the bladder had been entered without either party being aware of the malformation." Dr. J. C. Gooding records a case in which the lower portion of the vagina was undeveloped. The retained menses had burst through the urethra. The bladder could be entered with the greatest ease, even with two fingers, and this digital examination was painless. There was no incontinence of urine. The patient was married and coitus was followed by immediate desire to micturate.

Prevention and Cure of Ventral Hernia.

Smith (The Lancet) believes that ventral hernia after laparotomy is quite preventible. If allowed to develop, it sometimes causes more trouble than the condition for which laparotomy was performed, and it also prevents other patients from undergoing operation through dread of a similar mishap. The measures for its prevention are: (a) Leaving the stitches a month if the patient is thin enough to allow the use of a through-and-through stitch; (b) using non-absorbable buried sutures when the patient is fat enough to require two layers of ligatures; (c) discarding the abdominal drainage-tube after pelvic operations and, when necessary, draining by the vagina; (d) securing accurate coaptation of the cut edges by marking the places where the stitches are to go before the incision is made; (e) taking care that no peritoneum is curved up so as to come between the muscle and facia of opposite sides. Hernia can be cured if slight with a single buried silkworm-gut purse string suture. In larger cases the edges of the ring should be split until the recti muscles are exposed from top to bottom. These should be sutured with buried silkworm gut.

Position of the Woman During Delivery.

There is some diversity of opinion as to the best position of the woman during delivery. The English custom is to place the woman on her side with her hips well to the edge of the bed this position involves flexion of the thighs which distinctly increases the danger of perineal laceration. It is a position that has never met with favor in this country. Considering the different positions under question I am partial to the one recommended by William D. Porter in Journal American Medical Association.

For years says the writer, it has been the invariable custom of the writer to deliver in the following position: The woman lies on her back across the bed, her hips well to the edge and on a Kelly pad, so arranged as to carry fluids into a vessel on the floor. For this purpose, the small square pad is most suitable. The patient's legs are separated and extended. They are supported by assistants, by a couple of suitably placed chairs, or—an preferably—over the knees of the obstetrician, who sits on a chair facing the bed at a convenient distance. She should wear her stockings, her thighs should be enveloped in clean towelsand she should be covered with a sheet. This position is maintained from the end of the first stage untill the termination of labor, unless the second stage be

tedious. In that event, the patient can resume her ordinary position in bed, to be again brought into the position described before the end of the second stage. The position is not tiresome to the patient or physician and can be maintained for hours without discomfort to either.

The first thing after placing the woman in this position, is to have the nurse thoroughly cleanse the external genitals and inner surfaces of the thighs with a generous application of soap and hot water, followed by an antiseptic solution. This should, for obvious reasons, be a routine procedure, irrespective of previous preparation. It corresponds to the final preparation of the site of a surgical operation. It is claimed for this position that, with intelligent management, the parts so cleansed will not be infected during the labor. In case fecal matter escapes during a pain, it gravitates at once to the vessel on the floor, and all traces which could offend the sense of sight or of smell, are swept into the vessel by the free application of an antiseptic solution. The maintainance of a fixed position is unquestionably favorable to asepsis. The patient is less likely to contaminate the parts than if she were permitted to frequently shift her position. The physician can much more certainly keep his hands clean than if he were compelled to move about to accommodate himself to the changing position of his patient. He is constantly prepared to render assistance, and thus avoids the too common blunder of managing the termination of labor with hands improperly cleansed, on account of haste at the last moment.

This position also reduces the number of vaginal examinations. The examinations usually made from time to time by the accoucher, that he may be apprised as to the probable termination, are not necessary. Within reasonable limits, the time makes no difference, as the position insures constant readiness on his part.

This position, better than any other, insures control over the advance of the head as it is about to emerge. In the ordinary position the degree of control is by no means satisfoctory. Unless anesthesia be profound, the woman is likely to toss about at the critical moment. This often results in a needless degree of laceration. The position advocated eliminates this unfavorable element. The patient unable to secure points of resistance for her feet, can not change her position. The obstetrician is in complete control and can delay, to the most favorable time, the delivery of the head and can manage accurately the rate of advance when it is delivered.

When delivery occurs, first the head and then the body is grasped, and the child is carried up over the pubes. The nurse places the blanket, in which the child is to be wrapped, across the abdomen and pubes of the mother. On this the child is placed transversely and lower enough to permit of ready manipulation of the uterus. This avoids the danger to the child of infecting the eyes or cord with fecal matter and there is less liability that it may aspirate fluids into the air passages. Before the child is moved the cord is dressed and dressing secured by a binder. To allow quite an interval to elapse between the cutting and the dressing of the cord, with the possible danger of infection, is an unsurgical procedure. The facility afforded by this position for the delivery of the placenta and for the detection and repair of perineal laceration needs no comment.

Of no very slight importance is the ease with which the patient can be cleansed at the termination of labor. No other position permits such free use of water. If ordinary care has been used the woman is clean and her garments and bedding spotless.

Management of Fevers.

Love in Journal American Medical Association insists on the importance of attention to the digestive tract in fevers particularly. He thinks that the liberal use of water and flushing of the ailmentary canal are beneficial. In the management of fevers of whatever origin or cause he recommends the following: 1. Prompt, potent purgation. 2. Keeping up the action of all the eliminating organs to their full extent, and, the lungs are the most important of these, an abvndance of oxygen, and after this comes water in abundance. 3. Intelligent attention to nutrition, which demands the complete withholding of food in the beginning for several days and later only the blandest and most digestible foods in small quantities. The pushing of food can not be safely done until the secretions have all been corrected, and it is evident that the digestive organs are in no way crippled. 4. Temperature can be best held down and the nervous strain tranquilized by hydrotherapy and flushing and the easiest way is the best. The cold bath not only helps the excretion but quiets the fever. 5. We may also use gentle manual massage and even some of the manipulative methods of the osteopaths for soothing purposes and as a stimulant and tonic. 6. Sleep. Complete rest at proper intervals, physicially and mentally are essential. 7. "The Big Four Rout" to health in all dis-

eases including fevers is first, elimination; second, disinfection; third, nutrition, this means little or no food during the acute stage including stimulation, and fourth, tranquilization—rest. 8. We should not ignore the psychic elements and we should lead the patient in the direction of his good. We should study disease not less, but man more.

Pistol-shot Wounds.

Curtin calls attention in Medical Record to the numerous facts which should be ascertained by the physician who is first called to attend one wounded by pistol shot. These are practically the same as those ordinarily mentioned in works on medical jurisprudence. Observe for coagula and effusion of blood—as distinguishing between wounds inflicted upon the living and upon the dead, look for burns, powder marks, stains, etc. Observe the form and relative size of wounds of entrance and exit. He quotes Phelps as saying that burning of the skin is present up to a range of 6 inches, that the presence of powder grains shows that the range has not exceeded 5 feet, and that smoke stain is constant up to a distance of 8 inches. Penetrating powder of different calibers is discussed. A 22-caliber rarely penetrates the skull but a 32-caliber and upward usually does unless they strike a glancing blow.

Does Respiration Increase Elimination?*

Notwithstanding the teaching and belief, for ages, that perspiration is primarily a depurative process, and that there exists a constant and definite ratio between the quantity of waste matter thus passing out by the way of the skin and the amount and activity of the perspiration induced, the latest teachings of physiology prove that this idea is erroneous and has no foundation in fact. Such a conception undoubtedly arose long before the functions of the skin, or any vital organs, became known, from ignorantly believing that the relief and sense of good feeling which follows copious perspiration is due to the escape of pent-up waste matter, and that perspiration is both the cause and the means of its expulsion. We now know that elimination of waste matter comprises two distinct processes—its preparation, or elaboration, which is the special function of certain tissues and organs, and its dismissal.

The first of these processes is the all-important one. For, contrary to popular opinion, perfectly elaborated waste—physiological waste—requires no assistance of any kind to enable it to escape from the body.

Physiological waste arises from the final union of oxygen with the nutritive elements of food. It consists, principally of carbonic acid, urea and water; forms of matter from which all vital energy has been extracted, and for which the system has no further use.

Unlike nutritive residuals, which, for some reason, have failed to reach a completed stage of reduction, whose prolonged retention in the system, is an intermediate form, is injurious, and whose expulsion, in this form is so difficult that it becomes a pathological process, perfected waste is not only not harmful but its escape cannot be prevented. As soon as formed each of its several ingredients finds immediate and ready exit from the body through channels provided for this purpose. The pores of the skin are never so tightly closed that carbonic acid and water with the few organic salts it contains—forms of perfected waste normal to these channels—cannot pass through them, in any amount, without any hindrance of disturbance; the lungs afford egress with equal facility to all the water and carbonic acid presented to them, and the kidneys, never for an instant, refuse passage to urea, however rapidly and abundantly it may be formed.

Physiological oxidation, although a chemical process, is subject to the laws of vitality, and, for this reason, can neither be inaugurated or maintained in the absence of organic activity. It is not enough that oxygen be abundantly supplied. The oxygen-bearers of the blood may be filled to repletion with their precious freight, but none will be relieved until a legitimate demand for its use has been created by the functional, atomic activity of some tissue or organ.

Under normal conditions all vital action is automatically regulated. There always exists an exact ratio, in degree, between the amount of work done by any function or organ and the incitation which leads to its doing. There are three prominent incentives to oxidation: Muscular and nervous activity, and loss of vital heat. Of thes incentives the latter is, undoubtedly, the grearest, for, while each of the others occasions, at most, only a fitful and irregular action of oxidizing processes, the constant necessity for replenishment of vital heat permits no cessation of them.

As the muscles excel all other organs in bulk and activity, they are, at once, both the principal seat and instrument of oxidation. They not only supply the means for the exhibition of the physical energy with which every bodily function and organ is en-

*G. H. Patchen, M.D., New York.

dowed, but are, also, the source of all chemical activity of which vital heat and the corresponding discharge of oxidized products are the direct and positive evidence. This important function of the muscles—that of supplying the system with the chemical power required for all purposes—is too little appreciated and understood. It is not only the principal means by which health is normally maintained but when deficient, its augmentation becomes a most effective remedy for the successful removal of many serious forms of disease.

It is the explicit teaching of physiology that the amount of oxidation taking place in the system, at any given time, is greatly influenced by the state of the external temperature. It is at its maximum when the external temperature is from forty to fifty degrees below that of the body, so that the heat, interiorily produced, radiates freely into the surrounding air. When the external temperature equals or exceeds that normal to the body, a powerful incentive to oxidation is lacking. The result is not only a diminished amount of vital heat, but a notable deficiency of other necessary forms of chemical energy inseparably associated with heat production. Hence to subject the body to a degree of heat sufficient, in any form, to induce perspiration, instead of increasing the production of eliminative matter, positively lessens it. Cold, on the contrary, promotes oxidation by inciting muscular action, thereby making an increased demand for the chemical union of oxygen for the double purpose of the heat constantly lost by evaporation and of preparing new, nutritive material to take the place of that destroyed by the muscular effort it, (the cold) has induced.

Furthermore, the skin is not an elaborative organ like the liver and kidneys, nor the seat of chemical activity like the muscles. Therefore, beyond the preparation of the perspiratory fluid and its own products of waste, it does not participate in the general processes of oxidation. The channels of perspiration, it is true, afford egress for some of the products of perfected waste, but, like the lungs and bladder, only for such as are conveyed to them already prepared for exclusion.

Moreover, the proportion of physiological waste which finds its way through the skin is very small, whether compared with the total amount, from all sources, or with that from each source separately. Normally, no urea is discharged, and the carbonic acid which escapes is only about one-fiftieth part of the amount furnished by the lungs, while the quantity of water passing out is less, by far, than that which appears from any other source.

Lastly, the main object and use of perspiration is to cool the blood. Over ninety-nine per cent. of its composition is water. This water is not depurative; it is only regulative of the temperature. After passing through numerous minute coils of tubes in close proximity to the over-heated blood of the capillaries upon which it exerts a perceptably cooling influence, it reaches the surface of the skin to add to its cooling effort by more or less rapid evaporation.

The erroneous belief that the chief function of perspiration is to purify the blood has taken possession of the minds of both physicians and laymen to such an extent that a "good sweat" is almost universally believed to be the best possible remedy for any diseased condition of which faulty elimination is a cause. As a consequence, various devices for the artificial production of perspiration are abundantly provided. While it is true that many beneficial effects —some physical, some mental—occur as a result of copious perspiration, it is evident, from the foregoing consideration, that elimination of waste, to an extent proportionate to the amount of perspiration induced, is not one of them.

The Prophylaxis and Treatment of Puerperal Sepsis.

The recent developments in bacteriology and pathology have demonstrated conclusively the fallacy of the previously accepted theory of the essentiality of puerperal sepsis, and likewise have been able to explain its manifold manifestations by showing that wound infection and puerperal infections are identical and may be due to a variety of pathogenic organisms. In discussing this important subject John F. Moran, in the Journal of the American Medical Association, gives some interesting data concerning the use of the uterine douches. He says the experiments of Bumm, Doderlein, Kronig, and others, show that antiseptic douches tend to impair the normal bactericidal influence of the vaginal secretion, and, as the pathogenic organisms are not destroyed, or diminished in number, their use should be dispensed with. Pestalozzi reports 4,000 cases confined in the maternity in which no ante-portal or post-portal douches were employed. It was only necessary to isolate 33, and of these 30 recovered. Antisepsis is gradually giving way to asepsis. Routine douches before and after labor, are being discarded, and our attention is being directed to the thorough cleansing and the disinfection of the external genitalia, of the hands of the physicians

and nurses, of the instruments, dressings, &c., and to the avoidance or restriction of internal examinations.

The treatment says the writer should vary according to the character of the infection. It may be local, with a view of removing or destroying germs at the point of infection; or general, by the use of measures to neutralize the introduced bacteria or their toxins, and to fortify the system in its struggle against the infectious germs; or surgical, to remove collections of pus, and organs that may have become a menace to the welfare of the patient. I am confident, in the language of the writer, that the repeated giving of intra-uterine douches and the use of the curette in streptococcus infection, is decidedly harmful. The general treatment embraces the use of strychnine, nitroglycerin and stimulants to strengthen the heart.

In concluding his article the writer says: The treatment of sepsis will depend upon the skill and judgment of the physician and the condition of the patient. It would not be justifiable to open the abdomen without some physical reason. The different forms of sepsis should be thoroughly understood, for an operation will hardly be required except in pathogenic infection. When the operation is performed early many organs will be needlessly sacrificed, and if performed late, the mortality will be increased. When there is continued fever with increasing physical signs, the operation is permissible; without the latter, general symptoms would indicate systemic infection and surgical measures can only hasten the end.

Hysterical Ocular Syndromes.

Kœnig, in Boston Medical and Surgical Journal, claims that hysteria may simulate almost any disease of the visual apparatus, which makes the matter of diagnosis both important and sometimes of great difficulty. Both the motor and sensory functions are involved. There is usually a concentric contraction of both fields in hysterical amblyopia. Hysterical amaurosis resembles very much the true disease, and in both the onset may be very sudden. The amaurosis resulting from disease of the two occipital lobes frequently commences with symmetrical scotomata, which may be in the form of hemiopia, or horizontal or vertical hemianopsia. In hysteria there may be tonic or clonic spasms of the eyelids. The patient suffers but little inconvenience in hysterical amaurosis. The amaurotic eye is blind only when monocular vision is attempted, and it may be demonstrated by prisms that with both eyes unobstructed the vision of the supposed amaurotic eye is good. The contraction of the field is usually bilateral. A reversal of the field for colors is frequently noticed. Hysterical ptosis is always caused by spasms of the orbicular muscle, the skin not being wrinkled, the frontalis being contracted and the upper eyelid hanging over the lower. When raised it rapidly falls again. Thus in false ptosis the eyebrow is drawn down during the spasm, while in the true form the brow is elevated. False ptosis may be accompanied by paralysis of the opposite side of the body. Up to the present time no cases of hysterical paralysis of the ocular muscles have been reported, the disease being in the form of spasm or contracture. In hysteria of the extrinsic muscles the external rectus is always affected. These may be the only ones affected, or involvement of one may be associated with trouble with the internal rectus of the other eye. The external rectus muscles may be in a state of associated spasm with the orbicularis. Hysterical nystagmus may be distinguished by rapid irregular oscillations separated by short intervals of repose. The oscillations, like other motor disturbances, increase when the patient's notice is called to then, or when he attempts to fix his gaze. They may be made to disappear by suggestion. Mydriasis and myosis have been noticed. Finally the diagnosis must rest largely upon the presence or absence of associated symptoms.

The Hydriatic Treatment of Chronic Disorders.

J. H. Kellogg in Modern Medicine is of the opinion that the hydriatic method has not received the attention in this country which it deserves. The value of the hydriatic method in the treatment of typhoid fever is no longer a matter of discussion with scientific physicians. The great success achieved in the treatment of typhoid fever is leading to the gradual extension of the hydriatic method in the treatment of other acute infections febrile diseases. Judging from the statistics giving from various writers who employ this method of treatment in which hundreds of cases of typhoid fever are treated without a death we predict a greater usefulness for this treatment.

The most important organic changes induced by thermic applications says the writer of heat and cold maybe briefly summarized as follows:

Elevation of body temperature by hot applications is accompanied by increase of metabolism.

A fall of temperature resulting from an application of cold, is accompanied by decreased metabolic change.

Short cold applications cause rise of temperature and increase of metabolism.

Prolonged cold applications cause fall of temperature and diminished metabolism.

Short hot applications cause fall of temperature with diminished metabolism.

Prolonged hot applications cause rise of temperature and increased metabolism, especially in increased oxidation of albumin.

No disturbance of metabolism occurs as the result of baths at neutral temperatures, or while the body temperature remains normal.

Strasser showed increased alkalinity of the blood after cold baths, and diminution after hot baths.

Jardet has shown that the acidity of the urine is decreased by warm baths, and may even become alkaline.

By suitable local or localized applications, it is possible to modify the function of any and every organ of the entire body, in three ways: (1) By influencing the the capacity of the blood-vessels of a part, and thus controlling the volume of blood present in it at any given moment; (2) by increasing or diminishing the activity of the small arteries and capillaries, thus increasing or diminishing the amount of blood circulating through the part; (3) by increasing or diminishing the excitability and activity of the living cells upon which the functional activity of the part depends.

The Immediate and Remote Effects of Brain Fever.

The phenomena which immediately follow as a result of brain trauma are interesting chiefly on account of their diagnostic value in revealing the nature and extent of the injury and are of some importance in determining the questions of prognosis and treatment. In a lengthy and valuable paper by D. S. Fairchild, in Journal of American Medical Association, this subject is treated fully. He sites numerous cases with their results. In closing his paper he says:

1. Violence of no great intensity when applied to a limited area of skull may cause a fracture with only momentary displacement with a rupture of a meningeal artery, or a rupture of an artery without fracture.

3. A localizing injury which may lead to a fracture without displacement and hemorrhage does not as a rule cause a serous permanent brain lesion if early and judicious surgical treatment is employed.

3. A fracture may occur without apparent displacement, yet a real localized pressure on the brain exist which may cause irritative changes involving a more or less extended sclerosis and remote secondary results, as epilepsy or mental impairment.

4. A blow may be received on the head which may produce a more or less extensive laceration of the scalp which in itself is not serious. But the fall from a height or from a rapidly moving train may produce more or less extensive contusion or laceration of brain tissue leading to serious immediate or remote effects.

5. A fall from a height or moving train may without a fracture cause directly or indirectly a contusion or laceration of brain tissue or so disturb the cerebrospinal fluid as to primarily bring about such changes and cause immediate results or secondary serious remote effects by inducing degener ation and final interstitial changes producing insanity.

6. An injury may be of such a character as to produce a localized wound of the brain that may heal with the production of scar tissue which may extend, may or may not undergo cystoid or other degeneration with serious remote effects.

7. In the absence of localizing or other definite symptoms to indicate the nature of the lesion, the character of the accident and the manner in which the force is applied is of great value in reaching a conclusion as to the probable nature of injury to the brain

Intratracheal Injections in Bronchial and Pulmonary Affections.

It is possible by intratracheal injections to medicate the entire bronchial tree, and by absorption through the lymphatics to reach all portions of the lungs. Considering all the medicines used as sprays in pulmonary and bronchial affections the writer is highly partial to creosote and guaiacol. He considers the selection of a vehicle just as important as the selection of drugs to be used. His favorite vehicle is olive oil. He says this is not irritating, easily absorbed, facilitates expectoration of the mucus and adds nutrition to the body in proportion to the amount used. The list of drugs that have been used is a long one. The writer, however, confines himself to those he has himself used. He recommends a solution containing menthol, 2 to 4 per cent., and liquid guaiacol, 1 to 2 per cent. Camphor is frequently added in the same strength as menthol. The writer has used ichthyol, 2 per cent., also iodoform, 2 per cent. Of the various solutions mentioned above the menthol-guaiacol has been more extensively used than any other. The writer says from

his own personal experience he feels justified in drawing the following conclusions:

1. It is of no advantage in acute bronchitis, at least during the congestive stage.

2. It is of distinct advantage in subacute and chronic bronchitis.

3. It is of positive benefit in bronchiectasis.

4. It is valuable in pulmonary tuberculosis, relieving many of the symptoms, especially those due to secondary infection.

5. It quickly relieves the distressing symptoms of asthma. The amount of relief and the permanancy depend largely upon the predisposing and exciting causes.

6. It in no way interferes with other lines of treatment.

7. The writer has never seen harm follow its use, although in a very few instances it excited severe coughing for a short time.

Uric Acid Fallacies.

There are a great many absurd beliefs concerning uric acid in the urine. Physicians ascribe to uric acid all sorts of diseases, morbed changes, and symptoms. Frank Billings in American Medicine says it not only produces classic gout, but Headache, rheumatism, neuritis, hepatitis, nephritis, neurasthenia, arteriosclerosis, insanity, acid blood (uricacidemia), depression of spirits, extreme modesty, want of self reliance, moodiness, irritability and bad temper, unusual mental brightness, skin eruptions, pharyngitis, gastritis, enteritis, bronchitis, asthma, hysteria, and many other morbid changes and symptoms. These conditions are ascribed to the effects of *uric acid as a poison*. The literature of the past and present is full of articles treating of the above named diseases and symptoms due to uric acid.

From the above consideration of this subject concerning uric acid theories, and the morbid conditions which occur coincidentally with gouty states the following summary may be made.

Uric acid probably does not exsit in the blood in health.

Uric acid is probably formed in the kidney from two sources: (*a*) from urea interacting with some antecedent of urea, probably glycocin in the kidney. The large amount of uric acid excreted by birds and reptiles and the presence in the blood of these animals of urea and not uric acid points rationally to this source of uric acid in these animals and it is reasonable to infer that a part at least of the uric acid excreted by mammals including man is formed in the kidney in this way; (*b*) from the nucleins of the body, by oxidation, probably in the kidneys.

Uric acid is not poisonous. The presence of uric acid in the blood as the quadriurate or biurate probably means that it has been absorbed from the kidneys.

Defective kidneys are the cause of the accumulation of urates in the blood because of insufficient exertion.

Antecedent kidney disease is commonly present in socalled lithemic states which have often been attributed to the irritating offects of uric acid upon the kidney capillaries and the cells of the tubules.

The lesions formerly attributed to uric acid are probably due to the toxic effect of the alloxuric bases.

The presence of these lesions in the kidneys and in the connective tissue elements of the body lead not only to accumulation of the urates in the blood, but also furnish a proper condition of tissue for the deposition of the urates as concretions in joints and fibrous tissues.

The degree of alkalinity in the blood has no influence upon the presence of the urates in the blood.

The deposited biurate concretions cannot be redissolved out of the tissues by an attempt to increase the alkalinity of the blood and fluids by the use of alkaline medication.

The presence of concretions of the urates in the body comprise the sum total of its pathologic effects,

The socalled uric acid diathesis—the influence of heredity, bad habits of life, alcoholic indulgence, lead poisoning, etc., consists in a condition or tendency to disintegrate a quantity of nuclein far in excess of the amount usually split up with resulting increase of uric acid and alloxuric base formation.

The condition of the urine as to the presence of uric acid is in single specimens not indicative of the blood state in relation to the presence of urates.

The chemic reaction of the urine bears no relation to the presence of uric acid in the urine and blood, nor does it indicate the chemic reaction of the blood.

The Treatment of Gonorrheal Ophthalmia.

Dr. Wolfberg says in Boston Medical and Surgical Journal, that if seen early instill a few drops of either a 2 per cent. solution of silver nitrate or a 20 per cent. solution of protargol. Place a piece of clean ice in 100 gm. of water, to which 2 drops of formalin have been added. After dipping a small piece of linen or cotton pad in the solution it can be laid upon the ice and then transferred to the eyelids. An ice bag is contraindicated on account of its weight. If there is no membrane it is

better to commence with the nitrate at once, changing to the protargol if positive improvement is not immediately noticed. In order to remove the pus from the eye he uses a solution of formalin so weak that it does not cause pain. He frequently uses a 6 per cent. solution of borax to which a little salt has been added, combined with the formalin solution for irrigation every 15 minutes. Avoid injuring the epithelium of the cornea. As a means of protecting the good eye he favors an occlusive bandage arranged as follows: The edges of a piece of borated lint are smeared with glycerin gelatin, laid over the eye and made adherent with collodion. Keep the bowels open and give iodide of potash internally.

Greeff emphasizes the importance of a bacteriological examination by the "Gram method," to eliminate pseudogonococci. The gonococci can penetrate intact corneal epithelium, if in contact long enough, and this form of inflammation must be discriminated from the metastatic form, which is not at all uncommon, and is characterized by edema, oftentimes iritis, but without an especially profuse discharge. Gonococci are not apt to be found in the section, and the iritis is generally plastic. Metastasis in various parts of the body, usually in children, is mentioned. He thinks that the 2 per cent. solution of silver used according to Crede is too strong, may set up a suppuration and cause opacities of the cornea. A 1:4,000 solution destroys the gonococcus with certainty, and as weaker solutions penetrate corneal tissue more deeply by not causing coagulation he would suggest instillations of one-fourth or one-tenth of 1 per cent. for prophylaxis. Painting the lids may be dispensed with, as the cornea may be irrigated by the mother or nurse, the weak solution being simyly poured from the bottle, every hour, for a few days. The treatment of the disease in adults is less promising.

Treatment of Pulmonary Hœmorrhage.

The treatment of pulmonary hæmorrhage according to Robinson (Indian Medical Record) may be summarised as follows: (1) Relieve the patient's anxiety, unloosen or remove clothing, and place him in a semi-recumbent position. (2) Injection of $\frac{1}{4}$ or $\frac{1}{3}$ gr. of morphine with 1-120 to 1-60 of atropin. (3) A teaspoonful of common salt dry on the tongue, or 20 to 60 minims of aromatic sulphuric acid in a small quantity of water may also be given. (4) Order an ice-bag on the chest. (5) If the above fails to check hæmorrhage within a short time, cord the extremities, not too tight, but sufficiently to prevent return of venous blood. (6) Under no circumstances give ergot, alum, gallic and tannic acids, or any other local astringents. These have no special effect on the lungs and irritate the stomach and cause constipation. (7) Insist on absolute mental and physical rest with scanty, nutritious and chiefly a fruit diet, and relieve constipation either by Epsom salts or by enemata. (8) As a prophylaxis against further hæmorrhage, have the patient consume large amounts of gelatin prepared in various forms. (9) Mild collapse can be left alone. In severe collapse administer champhor hypodermically and nitroglycerine; also strychnine, not digitalis. Apply hot water bottles to the lower extremities. (10) It sometimes becomes necessary to resort to the enteroclysis and large amounts of saline solution, or to give the latter subcutaneously or intravenously.

Sigmoiditis. Its Treatment.

John L. Jelks in Memphis Medical Monthly thinks the following the most rational treatment in such a conditon:

The following, I think, is the most rational treatment which we can outline in such a condition: First, if the condition is specific in nature, of course treatment other than local presents itself at once. Second, if it be tubercular in nature, the same can be said as to systemic treatment, with the addition of climate and open air. If the condition is one of simple congestion, a free saline lavage of the entire intestinal tract, also local saline lavage, after which no food other than soft-boiled egg and toast, boiled or peptonized sweet milk, broths without pepper, and, if relished, buttermilk. Some antiseptic internal medication should also be instituted. To my mind the carbonate of guaiacol, bismuth subgallate and salol possess the greatest merits. Local lavage of warm water with glycerin and either formalin one to three thousand, or boracic acid 5 per cent., this to be followed, if deemed necessary, by the deposit of the oil, bismuth and iodoform into the sigmoid, either through a bougie or a sigmoidoscope, or, in this condition, where astringents are of value, fluid hydrastis, as Mathews remarks, is of the greatest utility. In the second stage, or that of inflammation, very much the same treatment is to be instituted, with the additon of nitrate of silver, *which should be applied through the sigmoidoscope, and only to the portions of the bowel which I have treated of. Silver nitrate, when applied, should always be used in greater strength than that which is generally advised in this treatment*, but the mild solution of silver is

very proper when the entire intestine above and below is to suffer for the purpose, in main, of getting the medicament to only a small part. I think a very much better plan is the use of a solution of thirty to forty grains to the ounce directly to the inflamed areas, whereby I get, by the only means possible, the desired effect of this drug. If any oil, iodoform and bismuth or other similar application is desired, the same can then be passed through the sigmoidoscope. I should here submit the following for use in this and similar cases: Iodoform, five grains; ichthyol, ten minims; cocoa butter sufficient to make one suppository, and insert through a sigmoidoscope on a long stick or probe; withdraw sigmoidoscope, and while so doing, insufflate either aristol or bismuth subnitrate and boracic acid. In the third stage, that of ulceration, the same treatment is instituted. The patient should remain in bed, and all articles of diet that are not easily digested and assimilated are interdicted. *Don't attempt, in any such cases as these, the use of bougies, as advised by some authorities; they are dangerous.* If the sigmoidoscope is used in the proper manner, the wall of the intestine will recede from the end and sides of the instrument as it passes further into the sigmoid. Any ulcerated areas should be carefully cleansed with formalin solution on a cotton swab, and the same touched with silver nitrate, then dressed with bismuth iodide, or bismuth formic iodide.

The Treatment of Scarlatina.

At this writing there is probably more cases of scarlet fever in the vicinity of Charlotte than there has ever been before. You cannot call it an epidemic but unless the most rigid rules are observed and strict quarantine carried out it will surely be an epidemic. This is a peculiar disease. It cannot be cut short one single day by any known course of treatment. It runs its course regardless of medicine. Serum therapy has been tried but the results have not been satisfactory. W. H. Wilder, in a paper in the Alabama Medical Journal writes as a prophylaxis measure the patient should be placed in a large room preferably on the top floor all draperies, curtains, carpets &c., should be removed. No one except the nurse, physician and mother should be allowed to enter the room. The room should be kept at a temperature of 70 deg. The physician should wear a rubber or cloth apron, covering himself from neck to ankles, put on rubber gloves, and use a stethscope on examining the heart and lungs. It should not be forgotten that however so mild the case you attending may be contagion for this case may cause a severe and fatal case in another child. A child that has had scarlet fever should be compelled to remain in quarantine for at least six weeks, no matter how mild the attack.

In mild attacks when the temperature does not run over 102 to 103, with little or no angina no medicine is necessary. The throat and bowels should be carefully watched and frequent examinations of the urine should be made to see if any unfavorable changes have arisen. If the itching is very troublesome carbolize vaselene or plain may be used to allay this. When the temperature reaches above 103 antipyretics are called for. Tepid or cold water should be first tried. When this does not suffice the patient should be put in an ice pack and temperature carefully watched. Ice caps frequently control both restlessness and fever. In extreme nervousness small doses of phenacetin are often of great benefit. Where the nervous system is violently attacked stimulants will be required. Strychnine and digitalis are recommended. The nose and throat often demand special care. In mild cases ordinary antiseptic gargles are all that will be needed. He recommends one dram of boric acid and two drams of biborate of soda to a pint of water as an excellent nasal douche. Cold applications externally to the throat from ear to ear by means of ice cloths are highly recommended. Should there be a diffuse cellulitis of the neck hot carbolized solutions should be applied to the inflamed surface. The greatest complications of this disease are those resulting from the action of the toxins on the kidneys, causing scarlatinal nephritis. On the first appearance of albumen in the urine means should at once be adopted to relieve the kidney as much as possible. Calomel, Rochelle or Epsom salts are all beneficial at times. Where there is great danger of uremic convulsions they may be averted by the use of hot packs and by morphine hyperdermically. Among other complications of this disease may be mentioned edocarditis, pericarditis, thrombus, embolism, rheumatism, synovitis, oedma of the lungs, broncho-pneumonia, pleuro-pneumonia, meningitis, gangrene, etc.

Tuberculous Laryngitis.

Statistics show that the larynx is affected in over 50 per cent. of cases which succumb to pulmonary tuberculosis. The widespread character of this disease then claims our careful attention, and when we remember the long drawn-out sufferings which may

accompany it, and the youth of the majority of its victims, our humanity is keenly stimulated in their behalf. St. Clair Thomson writes interestingly on this subject in the Journal of Laryngology, Rhinology, and Otology. He asserts that of all various situations in the larynx the most frequently attacked is that of the arytenoids and the neighboring interaytenoid space. Briefly recapitulated, he says the principles to bear in mind in tuberculosis of the larynx are as follows:

Pathology and clinical experience show that in the majority of cases the focus of infection is near or in the crico-arytenoid joint.

Many cases only present themselves at a stage when the possibility of effecting a cure by local measures is quite untenable.

The principle of *primum non nocere* should be constantly kept before us, as many measures which have been tried in this affection have only distressed the patient and hastened the disease.

In the light of present knowledge and therapeutic resources, the most rational principle is to attempt to make an early diagnosis of the disease while in an incipient stage. Any persistent or suspicious laryngeal catarrh should be treated seriously on even a presumptive diagnosis.

Once diagnosed, the patient should be treated on the principles laid down in the modern method of sanatorium treatment.

Symptomatic treatment should be directed to an irritative, catarrhal, or obstructive condition of the air-passage.

In addition, silence should be enjoined, the disuse of the voice being proportionate to the degree in which the focus of infiltration approaches or interferes with the arytenoid joint.

In cases where the situation or extent of disease do not warrant an expectation of complete arrest of the progress, treatment should be symptomatic, and in many such cases the sanatorium treatment is uncalled for.

Counter Prescribing.

Donaldson finds (Journal American Medical Association) the druggist is better equipped to do counter prescribing than ever before. He has on his shelf proprietary remedies that save him the trouble not only of compounding, but also of selecting. The patient makes the diagnosis and the druggist has the remedy mixed, labeled and guaranteed. He took the trouble recently to make a list from a druggist's shelves of the diseases treated by modern counter prescribing. He found there 18 sure cures for consumption, 22 for rheumatism, 12 for gonorrhea, and special remedies for other diseases such as diabetes, etc., together with numerous shotgun mixtures, called pain-killers, blood-purifiers, or system-renovators that cure all diseases. He says it would not do to say to our patients "do not use patent medicines" for they would think it selfish in those advising them. The only legislation man can conceive that would mend matters would be one to require manufacturers to put the ingredients on each package. The physician should avoid prescribing proprietary remedies in the original packages as it teaches patients to treat themselves and gives them the little knowledge that is often dangerous. There is no need of telling the patient what drug he is taking. If you listen in a drug store to the people you can hear them ask for quinine, morphin, ergot, calomel, bromid of potash and dozens of remedies of which they have obtained knowledge through the physician. Poisonous or dangerous remedies should be ordered off the market. Among those he mentions a "female regulator" that is put on the market, which is an ideal abortifacient so far as drugs are capable of acting in that way.

Gunshot Wounds of the Stomach.

Penn reports in Journal American Medical Association a case of gunshot wound of the stomach which was somewhat lower down than President McKinley's wound and was received when the stomach was full. The patient vomited freely as soon as shot, the vomitus consisting of the meal just eaten, together with quantities of clotted blood. He was fed exclusively on the mucilage of the cactus or prickly pear for fourteen days, which was allowed from the first, gradually returning to a full diet. There was never any decided rise of temperature and no evidence of peritonitis. The case is of interest as showing the unaided curative action of Nature occasionally in such cases.

Foreign Bodies of the Nose and Ear.

Percy Fridenberg, M. D., Medical (Record).

The recognition and removal of foreign bodies which found their way into the nasal cavities and the external auditory canal seem so simple a matter, the underlying principles of treatment are so well established, and technique of treatment is so uncomplicated, that the presentation of this subject might seem gratuitous. If, nevertheless, I proceed to give you a few rather elementary suggestions and to detail well-known clinical facts, it is because experience

shows that, men who ought to know better often show a surprising ignorance; that those who actually do know, sin against tneir better knowledge, and that even our teachers do not always practice what they preach.

Foreign bodies may enter the nose by the nostril, through the choanæ from the naso-pharynx, even without paralysis of the soft palate, as in violent vomiting or gagging, or finally by penatrating directly from without, which, of course, presupposes severe traumatism.

The presence of a forign body, even .in adults, is not always suspected. Nasal obstructions may be borne with patience, so that it is not surprising to hear of the detection and removal of foreign bodies which have been retained for years. The symptoms are usually quite marked, and nasal obstruction is the most prominent and annoying, affecting the respiration and giving the voice a nasal twang. This is caused first and foremost by the mechanical action of the mass of the foreign body, but to a minor degree as well by the reactive congestion and swelling of the nasal mucous membrane, particularly of the secretion due to irritation. As secondary evidence of obstruction we may have œdema or inflammatory swelling externally in the soft tissues of the face about the nose and suffusion of the eye. A sense of fullness, or actual headache, with pain of a neuralgic character in the nose, cheek, and orbit, may be present, with various sympathetic disturbances of the eye and ear, such as lacrimation and photophobia, tinnitus aurium, otalgia. Attacks of sneezing may occur, and quite rarely, in specially susceptible individuals, nervous reflex manifestations, varying from mild facial twitching, vertigo, nausea and vomiting, to spastic torticollis (Rohrer), and epileptiform attacks in a child (Wertheimer) have been observed.

Small foreign bodies may increase in size by imbibition of fluid from the nasal secretion, or by incrustation with a deposit of crystallized salts. In the latter case we then have the stony-hard, irregular nasal calculus or rhinolith, which in shape adapts itself to to the nasal passages, but, steadily growing, exerts even-greater pressure on its confines, and may at last cause deviation of the septum, or even a large perforating ulcer.

The recognition of a foreign body is not difficult in recent cases, especially when the history is unequivocal and points direcly to the cause of the trouble. In children under seven, unilateral obstruction with marked muco-purulent discharge may, with probability, be ascribed to foreign body. In adults, similar symptoms should at least lead us to suspect a like cause. Careful rhinoscopy with good light, thorough cocainization and exploration and palpation with the use of the probe are of great importance. In little children, cocaine anæsthesia may not be sufficient, and if there is much fear or restlessness—and this we may expect if instruments are to be passed into the nose—a whiff of chloroform or ethyl-chloride may have to be administered. If the obstructing mass offers a hard surface and some resistance to the probe, we have to deal either with a foreign body necrotic bone osteoma, or a rhinolith. Necrosis of bone is generally accompanied by intense fetor, deformity of nasal cartilages and bones, by hemorrhages, by less marked obstruction, and generally scanty or absent secretion, and the obstructing mass is usually less easily movable than a foreign body, and communicates through the probe the sensation of denuded bone, besides which its attachment to the nasal walls can usually be made out. An attempt at extraction may be necessary to assure the diagnosis.

Both foreign bodies and rhinoliths may be covered my mucus or pus, and may escape detection unless this layer is wiped away with a tuft of cotton wound on an applicator, and the probe used again.

Treatment.—After spraying the nares with a four per cent. to six per cent. solution, cocaine of the unobstructed nostril should be closed and the patient instructed to blow vigorously. This alone, in some cases, is sufficient to dislodge a small, smooth, or unimpacted bodo, such as a button of cherry pit. In children who are too young to blow the nose themselves, we may use inflation with a Politzer bag, blowing air in through the free nostril. Mackenzie advises the introduction of a stream of water through the unaffected side to flush out the obstructed passage. Direct syringing of the obstructed cavity through the pharyngeal opening with a post-nasal syringe or curved catheter is a safer plan. Sajou's method of clearing the nasal passage by drawing a tampon of moistened gauze through it from behind may be of service at times, especially if the foreign body has been pushed far back. If these manœuvres fail, direct extraction by instrumental aid must be tried. A strong probe bent over at the top, or a blunt curette may be passed between the foreign body and the wall so as to draw it forward or to loosen it so that it may be grasped with a slender angular forceps and extracted with a slightly rocking motion and as carefully and gently as possible. If the mass is too large to pass out at the nostril we may have to

push it back into the nasopharynx, after cocainizing the mucous membrane of these parts. The patient's head should be inclined sharply forward, or a finger passed into the nasopharynx to prevent the foreign body falling into the glottis.

If the foreign body cannot even be pushed into the nasopharynx, an attempt may be made to break it up with crushing forceps, rongeur or cartilage scissors. Very large rhinoliths may be reduced chemically, by the application of concentrated acids.

Gauze cotton plugs which have become soaked with blood and secretion easily escape detection, and the latter are removed with some difficulty if adherent, as they come away piece-meal. The use of cotton cannot be too strongly deprecated, and when gauze is used we should know just how many pieces have been inserted.

Epistaxis, more or less copious, may interfere with instrumental extraction, and this must be controlled if we wish to proceed safely and thoroughly. The preliminary application of suprarenal extract and cocainization will be of material assistance in this respect, as in diminishing swelling, and so giving a larger channel for the removal of the foreign body.

In the rare event of insects or maggots having entered the nose, syringing out with large quantities of weak bichloride solution (1:1000), carbolic acid (one per cent.), tobacco-water, or chloral hydrate, turpentine or morphine inhalations or insufflation of calomel have been suggested to kill and dislodge the troublesome visitors.

In the after-treatment of all these cases, attention should be paid to two important points, the cleansing of the nasal passages and the prevention of post-operative hemorrhages and infection.

Foreign Bodies in the Ear.—The common belief is that the presence of a foreign body in the ear, is necessarily a serious matter. This belief is groundless. Unless the object be tightly impacted in the canal, or be pressing upon the drumhead, or of an irritant or caustic nature, its presence may cause slight, discomfort, if any. The need for interference is seldom so urgent that time cannot be taken to obtain expert assistance, and the cases which prove to be serious and tax the ability of the aural surgeon are almost invariably those which have previously been subjected to the well-meant but injudicious efforts of the unskilful. As Politzer has said, "The consequences attributed to the foreign bodies are, with very rare exceptions, provoked by unskilful attempts at extracation, undertaken by unpracticed hands."

The presence of foreign body in the ear may be ascertained quite accidentally in the course of a thorough aural examination; even those which are large enough to affect the hearing seriously may remain undisturbed for years.

Foreign bodies may obtain entrance into the ear in a variety of ways: Those most frequently found have been introduced intentionally, as by children in play. The favorite objects are, as before, stones, pebbles, glass beads, buttons, "spit-balls," seeds, and pits. Adults, with more serious purpose of relieving itching, removing cerumen, or perhaps at times of stimulating mental processes, insert twisted paper spills, toothpicks, penholders, etc., which fortunately are not apt to be retained, except, in rare instances, by splintering. Other foreign bodies may get into the ear by accident, as in swimming, or be propelled with some violence, as small projectiles, chips of stone, etc. Animate foreign bodies may enter by their own efforts, as in the case of mature insects (bed-bugs, roaches, ticks, or flees) or larvæ may be hatched from eggs deposited in the meatus.

Symptoms.—Even more varied than the species of foreign bodies are the degrees of severity in the disturbances, subjective as well as objective, to which they give rise.

Inanimate objects, if smooth and not large enough to cause pressure (such as glass beads, buttons, etc.), which are not introduced very deep or with much force, generally cause no pain at all, so that in the absence of a clear history, their presence may be suspected only on account of ringing in the ears, slight deafness, or the feeling of fulness in the ear, and the peculiar sensation of "autophony" which give to one's own voice and sound of swallowing the disagreeable jarring sensation we feel when there is wax or water in the external meatus.

Bodies which wound or irritate the wall of the canal may cause more marked pain, while at times those which have caused no perceptible local changes set up reflex manifestations, particularly cough of a hacking, dry, irritating nature; the so-called "useless" cough. This depends more on individual susceptibility than on the character of the foreign body, being more frequent in children.

Vomiting, hiccough, trigeminal neuralgia, paræsthesia, dysphagia, facial tic, and even epileptiformic seizures reported in literature, are extremly rare.

Living insects in the external meatus cause great discomfort by their movements, but actual pain is the result of the animal striking against or attaching itself to the drum. Pain is, of course, a constant symp-

tom wherever the foreign body has wounded the meatus or the drum membrane. Perforation may be followed by middle-ear infection with the intense pain, throbbing, and general malaise characteristic of acute inflammation of this cavity. This is particularly apt to be the case with sharp-pointed objects, practically never aseptic, which have lacerated the drum and entered the tympanic cavity, often dislocating the ossicles. In fact, the foreign body may disappear behind the tympanum and remain in the middle ear, or even enter the Eustachian tube.

Diagnosis.—The sensation of a foreign body may be caused by various forms of external otitis or by irritation of discharge. Again, a small foreign body may have entered the ear and fallen out again without the patient's knowledge. In every case we must bear in mind the importance of a careful examination under the best focal illumination possible, want of which is probably the most fertile source of unsuccessful efforts at removal and of consequent damage. Under no circumstances should we permit ourselves to introduce probes, hooks, or forceps, and to feel about for the foreign body, unless every movement is controlled and guarded by the eye. The result would almost enevitably be to push the foreign body still farther into the canal, or even to perforate the drum

We may overlook a foreign body:

1. If the drum has been perforated and the foreign body has passed into the tympanic cavity. Careful examination may then reveal a perforation, and often a bulging of the drum, or distortion of the membrane by pressure of the foreign body, and the probe will impinge upon a more or less unyielding mass.

Secretion or exudate may conceal the perforation. Acute otitis media may finally necessiate a free paracentesis of the drum, which exposes the foreign body and clear up the diagnosis.

If the canal walls are occluded by swelling of the soft parts from injury by a foreign body, or rough attempts at extraction. This may be overcome by the use of a bivalve speculum, if necessary under general anæsthesia, or in the absence of urgent symptoms we may wait for the swelling to go down, assisting by the application of leeches to the tragus and to the of the concha, the instillation of astringents, and the use of hot moist compresses.

3. If the foreign body is incorporated with cerum. The detection is then of minor importance therapeutically, as the removal of the plug—preferably by syringing—is indicated in any case.

4. The sinus of the auditor canal is very deep and the foreign body lies in it, The sinus is a hollow in the floor of the meatus directly in front of the drum. If the foreign body does not appear when the patient's head is sharply inclined to the unaffected side, we may introduce a small middle-eer mirror. We may reach a practical result more simply and rapidly, however, by thorough syringing, which will bring out a forigen body if there is any there.

Treatment.—In most cases we will accomplish our object by freely and repeatedly syringing out the ear with warm boric-acid solution, to which a little soap or lysol may be added as a lubricant. We should always rely primarly upon the syringe as the best means of removing the foreign body, and be prepared to preserve with it. The chief contra-indications to the use of the syringe, none of them absolute, are the presence of a large perforation in the drum through which the foreign body might be washed; a sharp-pointed body which might wound the drum, or the development of severe nausea. In syringing, the curve of the membranous canal must be overcome by drawing the auricle backward outward, and slightly upward (backward and downward in little children); the syringe should not be directed along the canal, but somewhat toward the upper wall of the meatus, so that the stream, instead of impinging with force upon the drum, flushes it from above downward, and a steadier double current is set up.

The patient's head should be inclined toward the affected side, so that gravitation may assist us as far as possible. In case the foreign body is soft, the instillation has been advised of a mixture of alcohol and ether. Usually this is not necessary, as hot water will, finally soften masses and flush them out. This may be assisted by the careful use of a blunt curette or hook.

As therapeutic curiosities we may mention the method (quoted by Loewenberg as having decended from Celsus himself) for the removal of a foreign body by pressing against it a small camel's-hair paint-brush, previously dipped in melted glue, and withdrawing this novel instrument, after the semi-fluid sticky mass had set, with the foreign body adhearing; the loosening and eventual removal of a tightly-wedged cherry-pit by means of aspiration with an ear syringe attached to a rubber tube; and finally the use of irrigation by catheter from the nose. In case simple measures fail, the use of such instruments as the foreign-body hook or spoon, the wire loop, a bent probe, fine angular mouse-tooth for-

ceps, or more rarely a snare, becomes inevitable.

One and all of these instruments may cause serious mischief, unless used with judgement; and whatever procedure be employed, it cannot be considered safe unless carried out with perfect care through a good speculum and with ample illumination.

In the event of a foreign body which has penetrated so deeply or is of such a size as to give little hope of extracation by the methods cited, it may become necessary to expose the mass and to remove it by suitable instuments. After preparing the region about the ear by shaving and disinfection, as in a mastoid operation, we proceed. under full asepsis, to detach the concha and cartilaginous meatus from behind. An incision is made along the insertion of the concha, from the mastoid tip to the supramastoid ridge and including the soft parts down to the periosteum. This incision may cut through the cartilaginous canal which lines the posterior bony wall of the meatus, or the canal is dissected up from the underlying tissues and its posterior wall cut through at as deep a level as possible.

On retracting the flaps, the foreign body can be grasped and removed; at times, it is true, only after cutting away the posterior wall of the bony canal or the tympanin cavity and breaking up the mass. After carefully syringing and removing all chips and spiculæ of bone, the soft parts are replaced, the entire wound closed with numerous interrupted silk sutures, a tampon of gauze placed in the canal as a drain and splint combined, and a complete dressing applied over and around the auricle.

Serofibrinous Effusions the Result of Pleurisy or Pericarditis.

Are discussed by Brown in American Medicine. Tuberculosis either of the lung or pleura, or both, malignant growths, traumatism, infectious diseases and exposure to cold are causes of pleural effusion. The important physical signs are bulging of the intercostal spaces, dullness or flatness, increased resistance on percussion, decreased motion and diminution of tactile fremitus. There will usually be absence of breath sounds and diminution of vocal resonance over the effusion. Brown urges the routine use of the aspirator as a diagnostic procedure. Encapsulated effusion can be positively diagnosed only by the aspirator. Early removal of the fluid is the best prophylactic of purulent change. His ideas with regard to medicinal treatment are to get the secretions all in as nearly normal condition as possible and to use general tonics like iron, quinin and strychnin. The technic of aspiration is given in detail. Pericardial effusion is usually secondary to rheumatism in a majority of cases, to tuberculosis, to eruptive fevers, especially scarlet fever, to Bright's disease and to pneumonia by contiguity. The indications for aspiration of the pericardium differ from those of aspiration of the pleura for this reason, that while the former is merely palliative and is used to tide the patient over a crisis, the latter is curative, and a serofibrious pleural effusion aspirated after it has become stationary never returns. Aspiration of the pericardium is not a procedure of great danger, but it is usually only employed for an effusion that is overwhelming the heart, and in many such cases it will give the relief that will save the patient's life.

Dermatitis Vegetans.

A case is reported by Hartzell, in American Medicine in a man of 57. Two large plaques situated in the inguinal regions and extending downward a short distance upon the inner surface of the thighs were peculiar and striking features of the disease. These were violaceous in color, elevated, sharply defined and covered with thin whitish scale, with a few oozing points. Itching was intense. The disease began 18 months previous with an eruption of pea-sized pustules on the buttocks and scrotum, which afte a time became confluent and crusted. The patient died of catarrhal pneumonia after admission to the hospital. A microscopic examination was made of a peice excised from the border of one of the inguinal plaques and the findings are given together with a cut showing miliary abcesses.

Treatment of Uterine Fibroids in Pregnancy.

J. A. Boleris (British Medical Journal) Summaries his views on the cases of fibroids complicating pregnancy which should be operated upon, making use of the statistics he has himself obtained and those from other operators. When one has to do with pediculated fibroids of the cervix uteri, the evident indication is to remove them quickly. When there are very prom-prominent or pediculated sub-peritoneal fibroids situated on the fundus or body of the uterus, whether they are small or medium sized, and, if they are recognized at the time, then the operation to be chosen is myomectomy if there be the slightest sign of the pregnancy being interrupted or of danger appearing. Rapid increase in size of the tumor is a further indication, especi-

ally as the maternal mortality (9 per cent.) is really very small and can be made smaller. What is to be done with multiple or large intramural fibroids of the uterine body or isthmus in pregnancy is a very difficult question to answer; but, taking all things into account, Doleris is inclined in these cases to make the pregnancy a matter of little import, especially if the patient be a multipara. Early operation has given the least mortality; every week that passes increases the danger, and the risks from early operation are nothing to the latter risks to be encountered if the case be left alone. Between 1890 and 1900 there were 31 total abdominal hysterectomies with one death (maternal mortality of 3 per cent.) The cases to leave alone are those in which there is a single intramural fibroid of moderate size and giving little or no trouble; these are the *noli me tangere* cases. Under such circumstances the obstetrician must await developments. If at or near the full term, or during labour, serious conditions arise, then,and only then, surgical interference can be considered.

Tuberculous Lymphomata of the Neck.

Under the above title Dr. Franz Torek publishes a clinical lecture held at the New York Post-Graduate Medical School. The prominent feature of this article is that it shows the method of teaching the doctor employs. He avoids the purely didactic style as much as possible, but, by a series of questions, leads the students to make their own diagnosis, developing it step by step. Thus, in the case before them, after having heard from the patient that she had had lumps on her neck these five years and that they had repeatedly broken open and healed again, the students were led to describe what they observed by visual and tactual examination, viz. that there were a number of swellings in the submental, submaxillary, and sternomastoid regions; that their shape was round or ovoid, their surface smooth, their size varying from that of a pea to that of a small egg; that their consistency varied, some being softer, others harder; that they were almost painless; that some of them were freely movable, while others were restricted in mobility; also that there were scars on the skin.

Now, for the physical signs especially the shape, location, and multiplicity of the swelling, the first step in the diagnosis was developed, viz. that the effected organs were lymphatic ganglia, and, since their size was increased, they were termed lymphomata.

Next, to determine to what class of lymphomata the case belonged, the students were asked to recall to their memory the different classes of lymphomata. They were reminded that there are on the one hand inflammations, acute and chronic, and on the other, tumors of the glands, viz. malignant lymphoma, lymphosarcoma, and secondary malignant tumors, carcinoma or sarcoma. To determine upon the correct diagnosis, it was necessary to procede by the method of exclusion. To begin with tumors, malignant tumors were excluded, because they never become attached to the surrounding parts, nor do tehy ever break down, even in an advanced stage of the disease. Lymphosarcoma occurs always as a single tumor and soon becomes fixed. Secondary malignant tumors were excluded because of the absence of a primary malignant growth. As for inflammations, Acute Lymphadenitis was excluded by the length of duration of the case. So there remained only Chronic Lymphadenitis, and of this, the three varieties, simple hyperplastic,syphilitic and tuberculous lymphoma were to be differentiated. Of these, Simple Hyperplastic Lymphoma was excluded, because in that variety the glands are smaller, between the size of a bean and that of a hazelnut, also because they never become adherant, and never break down. Syphilitic lymphomata in the first stage of syphilis are accompanied by the primary lesion, in the second stage they are always small, about the size of a bean, and freely movable, while in the third stage, the gummatous form, they would have broken down long ago and formed the characteristic syphilitic ulcerations. There remained therefore only tuberculous lymphoma, and with this the case tallied exactly, as the glands, as stated, varied in size from that of a pea to that of an egg, and as some of the more recent ones were freely movable, while others had become adherent, and still others had broken down and formed scara.

As regards treatment, Dr. Torek said that, while it is possible for tuberculous lymphomata to heal without operation in any stage of the disease, we cannot rely upod nature to cure the disease. He recommended to try hygienic, dietetic, and medicinal treatment for a reasonable length of time in cases that are seen in the earlier stages, and, if these means fail to show satisfactory results, to resort to radical surgical operations for the removal of the glands.

Heredity in Tuberculosis.

King holds in Journal American Medical Association, the view that tuberculosis produces a relative immunity in the off-

spring, and that the heredity of the disease is correspondingly diminished. He thinks also that in his observation the average duration of disease in cases where there have been tuberculous parents has been longer and protection should be greater than in patients with no such ancestry. The conclusions which he offers are: 1. The percentage of consumptive having a tuberculous parentage is actually smaller than that having a non-tuberculous parentage, and much smaller than would be more than accounted for by the additional risk of infection to which the former class is subjected. 2. Tuberculosis in the parents renders to no inconsiderable extent an immunity to the disease in the offspring, an immunity which of course is but relative, and not sufficiently protective, but still demonsfrable, as is shown by increased resistance to the progress of the disease and increased tendency to recover among this class.

Influenzal Mastoiditis.

McCaw calls attention (Journal American Medical Association), to the frequency of mastoiditis immediately following epidemics of influenza consequent on tympanic infection, which is, therefore, tympanomastoiditis. The cases seem to be slow in recovery, the clinical picture being one of a very actice suppurative process in a tissue of low vitality. In the severer type of cases he believes that la grippe is responsible for more cases of acute suppurative mastoiditis than either scarlatina, measles or diphtheria. From Perez's experiments he makes the suggestion that we may have one inflammation due to inoculation of Pfeiffer's bacillus alone, whereas in the other variety it may be associated with pyogenic organisms, and the virulence of each may be increased. As regards treatment, his best results have been obtained in the hemorrhagic type by rest in bed, free catharsis, leeching in front of the tragus and over the mastoid, and from douching of the canal every two hours. He is well aware that this method of hot douching has been criticised, but it has not been followed by bad consequences and has given him the largest percentage of recoveries. In the suppurative cases he uses early and free incision of the drum, warm douching every two hours with cleansing processes, catharsis and if this does not relieve the patient in 36 to 48 hours, the case will be one for surgical interference. The amount of destruction which may take place in a short time is very notable. He has seen the entire mastoid in a purulent and necrotic condition with involvement of the facial nerve and facial paralysis in one week from the first ear symptoms. When we feel satisfied that pyogenic disease of the mastoid exists, our duty is to open the cells and not try to palliate or abort. In conclusion he emphasizes that we have two distinct types: "1. The suppurative, which invades the tympanum, antrum, and cells almost simultaneously in an unusually virulent and destructive process, which calls for early surgical treatment and in which abortive measures are contraindicated. 2. The hemorrhagic, with very pronounced symptoms at first, but which yields readily to abortive measures, and, in the writer's experience, only about 5 per cent. go on to suppuration requiring radical interference."

Association of Anemia with Chronic Enlargement of the Spleen.

Concerning these two interesting topics Arthur H. Wentworth contributes an able article in the Boston Medical and Surgical Journal and gives at the close the conclusions of G. Somma:

Anemia splenica infantile, or pseudo-leukemia splenic as it is called by others, is an illness prevalent in infancy, more frequent than generally supposed. Adults are not exempt, but it is probable that in these cases the origin dates back to early childhood.

Ignored or unknown until quite recently, it was brought into the domain of modern pathology by Antonio Cardarelli, Luigia Somma and Francesca Fede.

The disease is characterized by severe progressive anemia; chronic enlargement of the spleen which shows special characters not found in other diseases.

Clinically it has certain pathognomonic and accidental phenomena. The first are always present, the latter vary.

In its evolution there are usually 3 stages: Early stage, acme and stage of cachexia.

There are 3 forms of the disease: *a*, Chronic febrile; *b*, chronic afebrile; *c*, chronic with recurrent fever. Any one of 3 forms may appear in the beginning of the disease.

The true nature of the disease has not been discovered. He believes it to be due to a pathogenic organism that finds conditions most favorable for its growths in the spleen, whence it finds its way into the circulation and there produces the anatomical and functional changes which make up the clinical picture.

The course is chronic. The chronic covers a period of from 8 months to 3 years. There are not lacking cases in which the term is extended to adult life.

The result is fatal in most cases; in some the course is pronged to adult life; in rare cases the patients recover.

The prognosis should be guarded. The treatment is chiefly symptomatic. The indication for splenectomy is still a matter of discussion on account of its gravity. When performed it should be done early in the first period of the disease.

Scratch Maxks on the Wax-Tipped Catheter as a means of Determining the Presence of Srone in the Kidney and in the Ureter.

There could possibly be no simpler method of detecting a calculus in the urinary tract than by the method herein described by Howard A. Kelly in the American Jonrnal of Obstretics. A wax-tipped catheter is passed up the ureter into the kidney, if scratch-marks are found upon its withdrawal a stone must be present in the urinary tract.

At the close of his article he emphasizes the following points:

Catheterization of the ureter with a wax-tipped catheter is the most direct means of ascertaining the presence of calculus in the urinary tract.

The success of the method depends upon care and skill on the part of the examiner, together with attention by detail in the preparation of the instrument.

The presence of scratch-marks is the most important feature in diagnosis of calculus by this means, but the method affords valuable confirmatory evidence in other ways.

In ureteral calculus the method of dilating the ureter and thus inducing the escape of the stone through the natural channel may obviate the necessity for operation.

The presence of scratch-marks, if all precautions have been taken, is positive evidence of the existence of calculus, but the absence of scratch-marks cannot be accepted as proof that no stone exists.

The possible presence of a double ureter, with two openings in the bladder, should always be borne in mind.

Removal of Foreign Bodies from the Air Passages.

Deforest Willard, Philadelphia, (St. Louis Medical Review Nov., 2, 1901) concludes that:

Coughing should be encouraged; forcible inspiration restrained.

Inversion in the prone position as a domestic practice is advisable.

Laryngoscopy is helpful if the body is lodged at the vocal cords. It may be extracted by forceps or by laryngotomy.

If time permits, the X-ray may be brought into serviceable use for diagnosis.

Careful diagnostic investigation is important to determine the acutal presence of an impacted body, and its location.

Tracheotomy under local anesthesia should be the rule if the object is lodged at the bifurcatiou or in the bronchi. Tracheoscopy, suction and forceps' manipulation must be cautiously employed. Prolonged instrumentation adds greatly to the danger of pneumonia.

If extraction is not secured through the tracheotomy wound the chest wall should not be invaded unless an artificial respiatory apparatus like the Fell-O'Dwyer is at hand, and oxygen available. With the assistance of these appliances, however, the bronchus may be reached, anteriorly or posteriorly, since, by their use, rhythmical movements can be maintained.

Resultant abscess of the lung should be treated by incision and drainage.

Fallacy of Narcotization.

Dr. Paulson (Modern Medicine). It is irrational to attempt to produce sleep by the use of various sedative drugs, for, while they do temporarily so anæsthetize the brain cells that they are not conscious of the toxic substance that were previoutly irritating them, yet it must be evident that these drugs do not merely take a short excursion to the brain, but that they are diffused throughout the entire circulation, and must to a greater or less extent benumb the eliminating organs, thus tending virtually to increase the cause of the patient's difficulty. This has been clearly proved by injecting into the veins of a rabbit, according to the method elaborated by Bouchard, the urine of a patient obtained both before and after he took the sedative drug. It was found that the urine was far more toxic before the introduction of the drug than for a day or so afterward. This suggests that the introduction of the sleep-producing drug simply tended to accumulate in the system the poisons that were already so successfully keeping the patient awake, thus naturally requiring a larger dose the succeeding night to secure any satisfactory effect.

Treatment of Eclempsia.

The following rule says George R. Southwick in the Hahnemannian Monthly should be observed in the treatment of eclampsia:

The patient should be delivered as soon as possible, but carefully and without undue traumatism, and without to much attention to the interests of the child. If the cervical canal is undilated, use Hegar's di-

lators and introduce and elastic dilator, *i e.*, a metreurynter. On account of the danger of hæmorrhage Duhrssen's incisions should be reserved for a nearly dilated cervical canal, though the external os may be closed. Cæsarian section may be performed during the last moments of the mother's life in the interest of the child.

All obstetrical manipulations must be performed in narcosis, owing to the increased reflex irritability.

The utmost care must be taken to secure asepsis, as the eclamptic intoxication predisposes to sepsis.

There should be strict individualization in the use of remedies having a poisonous effect on the heart or kidneys, and to limit to the actual necessities of the case on account of the possible after-effects and failure to eliminate the toxines. Such remedies are chloroform, chloral hydrate, morphine and veratrum viride, Morphine should not be used with a frequent small pulse. The combined treatment of chloroform inhalation with enemas of chloral hydrate are recommended.

Every possible means should be taken to eliminate the toxines by exciting the secretion of the kidneys, skin and intestinal tract. The hot pack must be used cautiously on account of the danger of cerebral hæmorrhage.

Venesection and saline transfusion have a useful place in diminishing blood-pressure and diluting the toxines.

The inhalation of oxygen increased the oxidization of the blood, and by it the destruction of the toxines of eclampsia.

Use stimulants in case of threatened cardiac collapse, as ether, camphor or caffein.

La Grippe in Children.

A short and concise paper appears in the Brooklyn Medical Journal upon this subject by W. L. Chapan. In the article the writer shows how the disease, La Grippe may be confounded with acute chemical poisoning, pernicious malaria and auto-infection. Pernicious malaria he says is extremely rare in these latitudes at any time. Chemical poisoning might be intentional or accidental. The writer points out that our first guide should be the temperature. In poisoning the temperature would be subnormal or normal, while in 'grip it would be high. The respirations also would be a guide. If by chance the poisoning should be accidental such as an overdose of soothing syrup the breathing would be slow and sterterous while in grippe it would be rapid. In many cases he states the diagnosis between grippe and auto-infection must be mainly a matter of conjecture. One of the first things to ascertain when auto-infection is suspicioned, is whether the child is bottle or breast fed, breast fed infants rarely suffer from auto-infection. Explosive vomiting often precedes the collapse in auto-infection. In grippe this is rare.

In the treatment of this disease the writer asserts that no orthodox treatment can be laid down. The prophylactic treatment is the same as in any other contagious or infectious disease. The treatment should be supporting from the start. If the temperature is high, it should be reduced by sponging or the cold pack. As to internal antipyretics, the writer clings to liq. ammon. acetatis and spts. etheris nitrosi. He condemns the coal tar preparations severely; wisely does he place aconite and veratrum in the same class. Prostration must be met by stimulants, such as whisky, strychnine and digitalis. Internal anodynes should be witheld if possible. Internal medicine seems to do little else than derange the stomach.

For nervous symptoms nothing is more effective than external heat. If convulsions occur, the hot mustard bath is recommended. The bromides are too depressing. If vomiting is presented the writer recommends cocaine muriate 1-60 gr. creosote 1-10m: Sherry wine gtt xx and water enough to make one teaspoonfull. This is administered every two hours till the vomiting ceases. If there is much abdominal tenderness warm applications are soothing. The old fashioned spice poultice is grateful. In convalesence the hypophosphites and strychnine are recommended. The writer closed his paper in these terse words. "Use as little medication as possible and trust mainly to careful nursing."

Amaurotic Idiocy.

Morh. (Boston Medical and Surgical Journal) in his article gives a résumé of papers alread published on this subject, including those of Sachs of New York, who has collected cases where these two conditions co-exist, and in which the subjects are children. Ophthalmoscopic appearances are quite characteristic. At the macula will be seen a broad, white, spot having a brownish red center. There is also weakness, inability to get about, and a fatal termination. Several children in the same family are apt to be infected. The following are some of the usually noticed symptoms: Mental defects more or less complete; different degrees of paralysis of the extremities; reflex normal, diminished or intensified; loss of vision; atrophy of optic nerves; marasmus; death before the second year; several members of the same family.

The course is interesting and striking, as the child is born apparently normal in all respects and remains so for about a year, when the wasting process begins. The extremities become weak; the paralysis and amaurosis supervene. Then appear the changes at the macula which are known to consist in an edema with growth of the ganglion cell layer and atrophy of the nerve fibres.

Acute Glaucoma After Use of Cocain; Holocain in Glaucoma.

James Hinshelwood Boston Medical and Surgical Journal describes the instillation of a 2% solution of cocain into the eye of a woman aged 50, for the purpose of examining the fundus, which precipitated an attack of acute glaucoma. She had six diopters of hypermetropia. The fundus was found to be normal (?), and proper glasses were prescribed. Very soon she complained of pain in the right eye, becoming more and more intense and accompanied by vomiting. The next day the picture was typical. Symptoms subsided under the use of eserine followed by an iridectomy on the third day. Vision did not become normal. The author expresses himself emphatically against the use of cocain when there is the slighest suspicion of glaucoma, and it should never be used in treatment for the disease; and especially as holocain has all the pain-relieveing qualities of cocain without its dangerous effects. He recommends the latter in acute glaucoma, when it is deemed advisable to postpone the operation. He thinks it increases the effect of eserine and increases the rapidity and intensifies the mydriatic effect of euphthalmin. He does not combine the two solutions, but lets one precede the other. The unpleasant dragging sensation produced by eserine is not then noticed. It is of benefit in secondary glaucoma due to injury while awaiting operation. It does not increase the tension and seems to have a greater anesthetic effect than cocain.

Strangulated Hernia.

When from any cause, the circulation in a hernia becomes obstructed, it is said to be "strangulated."

Concerning this subject J. J. Brownson concludes and able article in the American Journal of Surgery and Gynecology as follows:

The danger in strangulated hernia has always been caused by delay. It is the condition that kills, not-the operation.

In all cases of abdominal pain and vomiting, the attendant must be sure to examine the hernial regions. Systematized details aways bring success.

When called to a case of strangulated rupture, the mode of procedure will depend upon whether the doctor is a surgeon or not. (a) If not an operator he should make gentle taxis; if not successful give chloroform and try again; if the hernia is still unreduced, give the patient a hypodermic of morphine, put on a hot compress and send for a surgeon at once. (b) If the attending physician is a surgeon he should make slight taxis; if he fails to get the rupture back, preparation for operation should be made while the chloroform is administered. When the patient is anesthetized, herniotomy should be done, and the radical cure performed.

Every case of hernia, whether strangulated or not, should be subjected to the radical cure. It should be the rule to operate to prevent strangulation as well as for strangulation.

On the Use of Alcohol in Phthisis.

Edward Preble, in the Journal of Tuberculosis, writes well concerning this subject. The use of alcohol in phthisis was at one time thought to be a specific for phthisis. To-day the physiologlcal action of alcohol is well known. It checks nitrogenous waste promotes appetite, in small doses accelerates digestion, facilitates the pulling on of fat, and slightly reduces temperature. It stimulates the heart and nervous system and favorably influences the night-sweats and insomnia. Alchol he says: should therefore be a valuable remedy in phthisis, if all possibility of abuse is guarded against. All depends upon quality and dose. Now, as formerly, tolerance is an essential point, and the use of the drug should be forbidden to all in whom its action goes, so to speak, against the grain; and this prohibition includes all children. Patients may exhibit intolerance to malt liquors and yet derive benefit from spirits; even the season of the year plays a part in relative tolerance; for malt liquors seem to be more acceptable to some individuals in the hot months. It is generally agreed that alcoholics are best taken while eating, and if spirits are required between meals, they should be given in the form of egg-nog and milk-punch. As a general proposition all spirits and strong wines should be given diluted.

Under certain circustances alcohol is contraindicated even in the absence of intolerance. Its use is generally believed to be inappropriate after hemoptysis, or perhaps in case in which repeated hemoptysis is a feature. In the gastritis which not infre-

quently accompanies phthisis, alcoholics are necessarily out of place. In cases of phthisis in which cough is unusually distressing, the use of alcohol may or may not be contraindicated. Williams, the English expert, finds that the various alcoholics exert a different influence upon cough, and that good claret may be borne in these cases when other forms of stimulants produce irritation. Upon this point experience alone must be our guide.

Syphilis of the Nervous System—Its General Pathology, With Remarks on Treatment.

Syphilis in all its manifestations, in all its stages will always be of interest. Syphilis of the nervous system has always attracted wide attention. F. W. Langdon in the Journal American Medical Association says the pathological processes concerned in syphilis of the nervous system comprises:

A localized parenchymatous and interstitial neuritis at the site of the initial lesion, due to endarteritis, compression and local toxic action.

A localized root neuritis (cranial or spinal), and a peripheral mono-neuritis, both of gummatous type, may occur in the "secondary" stage. A generalized or "multiple" neuritis has been reported, but is so rare as to be a pathological curiosity and open to doubt as to origin.

A generalized toxemia affecting the nerve centers directly or metabolism in general and producing febrile reaction of a "specific" type, *i. e.*, "secondary" fever.

Inflammatory ("gummatous") lesions, due to disseminated or localized vascular infections. The arterial walls are the chief seat of these gummatous exudations, and the exudate may begin as a "periarteritis," a mesarteritis or an endarateritis, eventually in most cases becoming a "panarteritis"—Barkley. The exudate is always intra-mural —not intra-lumenal—the narrowing of the lumen being due to concentric or nodular thickening of the walls, and heaping up (proliferation) of the deep endothelial layers of the intima. Necrotic changes in the inner layer probably precede thrombosis.

The infecting material (bacteria?) probably reaches the vessel wall via the vasa-vasorum, from which a portion of the exudate at least is derived. Direct infection of the lining endothelium, by the main blood stream, is unknown and probably does not occur, excepting in the terminal capillary plexuses.

The materials constituting the inflammatory exudate in all forms of gummatous syphilis, whether arteritis, meningitis or tumor are biologically identical, the difference which exist anatomically being due to location and distribution of the exudate. The characteristics of gummatous syphilis of the nervous system are: (*a*), the lesions are primarily vascular; (*b*), the lesions are usually multiple; (*c*), the lesions are usually non-systematized in a neurological sense, though they show a predilection for certain localities—namely, the basal meninges, and the arteries of the basal ganglia and motor area; in the cord, the meninges and the ventral horns.

Gumatous lesions are, in a measure, self-limited, their growth being checked by: (*a*), central necrosis, due to deficient vascularity; (*b*), the probable development of an antitoxin which checks the local proliferation of microbes; (*c*), fatty degenerations and absorption of the fluid portions with caseation or cicatrization of the remainder

Degenerative nervous processes, due directly to syphilitic exudations, are of two types: (*a*), "compression" degeneration due to prolonged pressure by gummatous masses or their cicatrical sequelæ which separates various neuron processes from the influence of corresponding "trophic centers" (neuron bodies); (*b*), secondary degeneration consequent upon destruction of these same neuron bodies by softening, of thrombotic or hemorrhagic origin. The preceding two types are classed as "non-systematized" degenerations, in contra-distinction to:

Degenerative diseases, of "systematized" type, such as locomotor ataxia and paresis, These should probably be looked upon as malnutritional affections due in part to arterial degeneration (fibrous or hyaline or both) which may or may not be of syphilitic origin; and in part to inherent individual predisposition to early disolution of certain physiological system. These degenerations are not benefited and may be made worse by vigorous anti-syphilitic medication.

Remedies of value in syphilis may act in three ways: (*a*), the most usual, by promoting necrosis in the embryonic cells of the exduate, thus permitting their removal in large part by the lymph channels; (*b*), by stimulating the excretor organs generally thus favoring removal of "toxins" procuced by the disease; (*c*), possibly by the promotion of leucocytosis and other tissue changes, which set free an increase of the natural amount of (hypothetical) antitoxin. In no case do these remedies act as "absorbents" or "stimulate the absorbents," nor have we reason to believe that they destroy the microbes of the disease.

Any lesion of the nerve centers, attended or followed by inflammator exudate, whether syphilitic or no-syphilitic, may be favorably influenced by the judicious administration of mercurials and iodids; and subsequent amount of damage by cicatricial compression or irritation materially lessened.

The discovery of a means of producing artificially an antitoxin which shall arrest the disease in an early stage, must be conceded as a possibility.

Removal of Foreign Bodies from the Air Passages.

The entrance of a foreign body into the larynx is at once the signal for violent expensive efforts, and in the majority of instances voluntary extrusion is accomplished. The best methods for the removal of foreign bodies from the air passages is discussed quite at length by Dr. Forest Willard in the Journal of the American Medical Association. He says coughing should be encouraged; forcible inspiration restrained.

Inversion in the prone position as a domestic practice advisable.

Laryngsocopy is helpful if the body is lodged at the vocal cords. It may be extracted by forceps or by laryngotomy.

If time permits, the X-ray may be brought into servicable use for diagnosis.

Careful diagnostic investigation is important to determine the actual presence of an impicated body, and its location.

Tracheotomy under local anesthesia should be the rule if the object is lodged at bifurcation or in the bronchi. Tracheoscopy, suction and forceps' manipulation must be cautiously employed. Prolonged instrumentation adds greatly to the danger of pneumonia.

If extraction is not secured through the tracheotomy wound the chest wall should not be invaded unless an artificial respiratory apparatus like the Fell-O'Dwyer is at hand, and oxygen available. With the assistance of these appliances, however, the bronchus may be reached, anteriorly or posteriorly, since, by their use, rhythmical movements can be maintained.

Resultant abcess of the lung should be treated by incision and drainage.

Anemia With Chronic Enlargement of the Spleen.

Arthur H. Wentworth, in an able article in the Boston Medical and Surgical Journal, cites several cases of anemia with the accompanying symptoms of splenic enlargement. In his summary he says:

The blood changes in cases of so-called anemia splenica are those of a secondary anemia. The degree of anemia varies in different case.

The degree of cachexia, which has been described in these cases, does not always correspond to the blood changes, which are often moderate rather than severe. The percentage of hemoglobin frequently is over 50 per cent. In one of Banti's cases it was over 68 per cent. The number of red corpuseles is often more than 3,000,000 in a cmm. It is obvious that the cachexia, does not depend upon the diminished number of red corpuscles and the quantity of hemoglobin. It is not improbable that the cachexia and other symptoms are produced by cancer, tuberculosis, etc., and that the splenic and blood changes are merely two of the results which are thus produced. The source of the intoxication is unknown, and it is very probable that it may come from various sources.

It is not easy to see how fibrous changes in the spleen can interfere materially with the functions of an organ, as in cirrhosis of the liver, or in interstitial nephritis. But there is no analogy between these organs and the spleen. Fibrous tissue in itself cannot be considered capable of producing toxic or other substances. It can produce mechanical disturbances by interference with the circulation; or from the increase in size which it may produce in an organ; or by interference with the functions of an organ through injury of its cells. We know that the splenic functions, whatever they may be, are not essential to the life, or apparently to the health, of an individual, and, so far as is known, after the removal of the spleen, the functions of that organ are not performed by other organs. Therefore, the more interference of function fron an overgrowth of connective tissue in the spleen could not produce the symptoms described as characteristic of anemia splenica. The functions of the spleen are in no way analogous to those of thyroid gland and suprarenal capsules.

If it were possible for fibrous tissue to produce toxic substances, it is difficult to account for the absence of such substances in connection with chronic hyperplasia of the spleen when associated with a variety of well-known causes. In these cases the lesions in the spleen are identical with those described by Banti as characteristic of anemia splenica.

It has been stated that the splenic alterations are primary, and precede all of the other symptoms. This statement requires further observation to confirm it. Bruhl remarks that the splenic enlargement may come before or after the anemia. The lesions in the spleen are characteristic of chron-

ic hyperplasia, a condition which is associated with a number of abnormal conditions in various organs, and which frequently gives rise to no syptoms, or in other cases causes such symptoms as may be produced by the size and weight of the organ.

The lesions found in the spleen in cases of so-called splenic anemia do not warrant the statement made by Banti and othrs, that this condition is related in any way to pseudoleukemia. There is no analogy between the hard glandular form of malignant lymphoma and the lesions of chronic hyperplasia in the spleen. In addition it may be said that considerable uncertanty exists as to the nature of the hard form of malignant lymphoma, and its classification is a matter for discussion.

In the case of splenic anemia nothing characteristic of a primary disease has been discovered in any organ or in the blood. The number of cases, small as it is, unquestionably shows a diverse etiology. The investigations have very incomplete, and of the statements depend upon clinical observations. No better proof of a varied etiology is needed than is to be found in Banti's own cases.

The evidence is conclusive that anemia infantum pseudoleukemica is a secondary anemia, and that it owes its peculiar symptoms and blood chages to the occurrrence of severe anemia at an early age.

There is little doubt that anemia infantum pseudoleukemica and anemia splenica infettiva are identical conditions, and there is even less proof that anemia splenica infettiva is primary disease of the spleen than that anemia infantum pseudoleukemica is a primary disease of the blood.

There is no apparent connection between the character of the blood and the splenic changes in infancy. Cases with identical lesions in the spleen—namely, chronic hyperplasia—show varying degrees of anemia. At times there are marked changes in the blood, and at others the changes are very slight. The degree of leucocytosis varies in the same way. In some cases it is considerable, and in other cases the number of leucocytes is normal or even diminished.

These differences cannot be explained by the duration of the condition in many of the cases. All that one is justified in concluding about these secondary anemias of infancy is that in some cases there occurs a chronic hyperplasia of the spleen, and in others the speen is not altered.

The names anemia splenica, primary splenomegaly, anemia splenica infettiva and anemia infantum pseudoleukemica are objectionable, because they are misleading. Anemia splenica has been used for many years as one of the synonyms of pseudoleukemia, and should not be used to describe conditions that are in no way related to pseudoleukemia, No evidence has been furnished that justifies the use of the word "primary" in connection with splenomegaly. The same may be said of the word "infettiva" (infectious) in connection with the infantile form of splenic anemia. Anemia infantum pseudoleukemica is a secondary anemia of infancy, and in no way related to pseudoleukemia.

Causes of Epilepsy.

Dr, Spratling of Sonyea, N. Y., Medical News said that 85 per cent. of the cases of epilepsy occur before adult life. Epilepsy after the twentieth year is different from that which develops before. It is the epilepsy of early life that oftenest produces unsoundness of mind. This is because it has a systemic basis. Heredity is a very marked feature in the etiology. Epilepsy occurs in parent and offsping in 16 per cent. of all the cases at the Colony. Alcoholism in the parents is fouud in 14 per cent. insanity in 8 per cent. and tuberculosis in 13 per cent. This accounts for more than one-half of all the cases. Undoubtedly many cases of early epilepsy develops as the result of birth injuries.

The bromides are undoubtedly the best remedy to control, but not to cure epilepsy. Owing to the depressing effect upon the system they should be used in combination with narcotics, nutritives, alteratives., baths, enteroclysis, and constant care of the dietary, the amount of exercise, the amount of sleep and the regulation of the daily life. In order to have the system take up bromides better, sodium bromide has been substituted for common salt as a condiment for the food. This proves an excellent method of administering it. Of late an organic compound of bromo-bromine-bromopin has been used. This does not produce constipation, nor hebetude, nor acne. An advantage is that it may be used in the status epilepticus hypodermically without producing abcesses Surgery sometimes does good in epilepsy but not very often. In one case of Jacksonian epilepsy, with the aura always in the first joint of the thumb, there were 500 attacks in 50 hours. The brain was examined very carefully by pathologist who was unable to find any pathological change in it.

The Curability of Syphilis.

Within the last few years a decided and marked change has taken place in the med-

ical profession as well as among the laity as to the curability of syphilis. Upon this subject we glean a few wise remarks from an article in the International Medical Magazine by William S. Gottheil. He contrasts the two diseases, gonorrhea and syphilis, nicely. The patient with gonorrhea wishes to know how soon he will be cured, the patient with syphilis wishes to know will he ever be cured.

The layman regards gonorrhea as a trivial and transitory affliction, while he looks upon syphilis as an incurable disease. Recently, however, the stubborness and dangers of gonorrhea are beginning to be appreciated by the medical profession, and syphilis is still regarded as a mysterious *bile noir*, whose effects never end. There are still some who claim that syphilis can never be cured. The writer thinks that it can be cured beyond peradventure, and in a great majority of cases is cured, further than that he considers it a self-limited disease, and ends in time, even when untreated.

As to the curabilty of syphilis he draws the following conclusion :

Syphilis is a curable disease, and may even with restrictions, be called a self-limited one.

Whilst the cure of a given case can never be affirmed with scientific accuracy, the chances of its being the fact after a certain time under proper treatment are so great that it may properly be claimed to have been effected.

Practically, a patient who has been properly treated through the active stages of his disease, who has had no manifestations of it for several years thereafter, may be regarded as cured, and may be told so.

Chorea.

James H. Taylor A.M., M.D., (Cleveland Medical Gazette) :

Many theories are prevalent to account for this malady. It rarely occurs before the fourth year and the colored race seem immune. It occurs more frequently among crowded and low conditions of life, though no social grade or community is immune. It occurs among girls twice as often as boys. Heredity influence certainly plays an important part as a predisposing factor.

Chorea and Rheumatism have always been closely associated. The writer holds the following position :

I. That a child may inherit a vitiated constitution, with a tendency to the development of various neuroses.

II. That rachitis and kindred food disorders and the various diseases of nutrition lay the foundation for the supervision of nervous disorders.

III. That the infection of rheumatism with reluctant anemia, is a potent factor in irritating the centers and in the production of chorea.

IV. That in the exceptionally impressionable child the various peripheral excitants (adhered clitoris, phymosis, pinworms, etc., etc.) may precipitate the symptoms of chorea.

V. That chorea is a self-limited disease, ordinarily tending to spontaneous recovery in from six to ten weeks,

VI. That one attack does not render the patient immune—relapse or recurrence being the rule.

VII. That the prognosis of chorea in childhood is favorable, since the common termination of the disease is in complete recovery.

In the treatment of chorea no specific has as yet been accepted. Arsenic has been used more extensively than any other drug. In some cases marked benefit is seen and we not only get marked results but deleterious effects.

Antepyrin is also recommended by many. When the associated diseases manifests themselves remedies for them will often be beneficial. If rheumatiom is present the salicylates are serviceable. If there is a malarial taint, arsenic or quinine may be indicated. Rest is indicated in every case. If the patient is anæmic tonics are indicated. A plain, easily digestible diet should be given in all cases. Sound sleep and plenty of it must be obtained. The strength of the child must be preserved. In all cases the bowels should be regulated.

Some Obscure Injuries Following the Toxic Use of Alcohol.

There are many serious organic diseases which are traceable to syphiljtic infection, to heat and sun-strokes, and also to brain shocks, concussions or injuries from falls, and blows on the head. T. D. Crothers, in the Interstate Medical Journal, says alcoholic intoxication is the first cause of many equally serious diseases and neuro-psychosis, although this fact is largely unknown and unrecognized by the profession. In this article the writer describes several cases of alcoholic intoxication in men who had heretofore been abstainers and the results are startling. They show the marked types of neuro-psychoses and psychopathis which are traceable and began with the first profound intoxication from spirits. He states that every intoxication from alcohol is both a physical and psychical concussion to the brain center and the be-

ginning of both organic and functional changes which may go on rapidly or slowly. Frequent intoxication develop imbecility and marked dementiæ. In closing his article he emphasizes these prominent facts:

1. Intoxication from alcohol to the extent of coma, with profound relaxation of all the functional activities of the body, is often a serious injury to the brain and nerve centers, and is followed by neuroses and organic change.

2. The significance of alcoholic intoxication in the study of obscure diseases can not be overstated. It may be both an active and an exciting cause, and should always be considered in neuro-psychopathies or other disorders that follow.

3. Intoxication at puberty and in middle life is often the starting point of a circle of disease which is usually ascribed to other causes.

4. Intoxication always predisposes to the diseases of inebriety from alcohol or opium, which may come on suddenly at any time in after life.

5. Poisoning from alcohol is far more serious than supposed, both in ifs effects and the neuroses which follow.

Care of the Aged.

This is a most important subject and demands an earnest consideration. There appears in the Medical Age a short instructive article from the pen of Ewing Marshall. We kindly abstract some of the leading points.

The number of years, he says, a man or woman has lived is no criterian as to his or her physical condition. The French adage that "A Man is as old as his Arteries tells the Story." He speaks wisely when he says temperance through youth and maturity predispose to longevity. Those longest-lived, he notices, have been partakers of liquors in great moderation, especially of wines with their meals.

Contrary to the general opinion of medical men, this writer says that he is convinced that moderation in the use of liquor certainly does not diminish the chances for longevity. Further, he says, the temperate use of liquor has seemed to predispose not only to longevity but also to useful old age. As long as the mind and body have systematic use so long will their condition be predisposed to health. Mental and physical exercise alike should be used but not abused. As to diet, no iron-clad rules can be laid down. There should be no immediate change in the life of those advanced in years. If they have been total abstainers all their lives and from one cause or another have no appetite, it would not be wise to resort to stimulants to create a false appetite.

He says all stimulants to the aged should be given guardedly, also strychia and the like for the brittle vessels of the aged cannot endure to sudden tension. Hemorrhage into the brain or elsewhere is often superinduced by such measures. The aged like, children, should be given as little in the way of drugs as possible. Drastic purgatives are contraindicated. Salines act best. Sudden changes in altitude are dangerous. Cleanliness in the aged, like children, is of great benefit. Sleep, the great restorer, has more to do with longevity than any one thing. Other things being equal, a good sleeper will outlast in any trial of life.

Tubercular Peritonitis.

The general circulative and alimentary canals are the two canals which frequently carries the infection. Tuberculosis of the vagina and ovary are extremely rare diseases. The lymphatic glands are also responsible for the carrying of the infection to the peritoneum. A good example of this can be seen when we find a tubercular pleura as the primary focus.

The disease usually sets in with fever, abdominal tenderness and the usual symptoms of an ordinary peritonitis. The chronic variety is gradual in its onset and so slow in its development that it may give rise to no symptoms. Enlargement of the abdomen may be the first symptons noticed. Along with this there may be severe pains, with intermissions of comparative comfort. One of the most important symptoms is an irregular elevation of temperature, though at times the temperature may be normal or subnormal. As the disease progresses digestive disturbances are conspicuous. Loss of appetite, nausea and vomiting, and diarrhœa or constipation.

To make an absolute diagnosis of tubercular peritonitis resort must be had to the use of the microscope or on inoculation experiments. Oehler, who has had a large experience with outdoor patients of this kind, says that the diagnosis is comparatively easy when there is loss of weight, cachexia, slight fever, occasional diarrhœa, enlarged abdomen, in which the presence of fluid and at times of small nodular tumors can be determined.

Pigmentation of the skin, especially that of the face has been repeatedly observed in tubercular peritonitis. The prognosis of this disease until recently has been very

†Abstract of a paper in the ——

high. Frequent recoveries of late years are reported.

Casinori states that of 840 cases reported 208 died. The prognosis must unnecessarily be considered unfavorable. In children and the ascitic form the prognosis is still more unfavorable.

Privileged Medical Communications.

The privileges and privacy that usually exist between physician and patient is of much interest and gravity. The lawyer holds all communications from his client as privileged even although the latter be a criminal. The courts sustain lawyers employed as counsel in refusing to teitify as to what their clients reveal to them. The Massachusetts law is a good one along this line. It not only protects him but forbids him to testify as to his knowledge obtained in a professional capacity. In a paper by Daniel W. Cheever, in the Boston Medical and Surgical Journal, considers two important points (1) when should the doctor be protected in keeping silent? (2) when could he be with propriety obliged to reveal what has been told him. Further discussing this subject, he classifies it as follows:

(1 *Privileged Communications.*—Indiscretion, weakness, fear, sin, all seek the family physician as a father confessor. He holds the honor of the patient, and the character and social standing of families, in his hands. He knows what no other knows —and he often knows what is unknown in the family itself. Mental obliquity, cases of conscience, private diseases, hereditary taints, sins of a sexual nature, once committed but long repented of hysterical fears, questions of inheritance of responsibility mentally, of illegitimacy, of adultery, of suicide, of life insurance, of testaments—why lengthen the list? It is endless. It involves every relation of human life. The doctor holds, and holds sacred, if he is allowed to, the secret history of many families, and when advanced in years and practice carries to the grave with him knowledge which would revolutionize the whole communities. The mischief of telling is so much greater than the mischief of concealing, that the simplest principles of expediency should forbid the revelation. Every instinct of honor, propriety, decency is arrayged against it. Hippocrates laid an obligation on his students that nothing heard in the sick chamber should ever go outside it. The wisdom of former ages is only confirmed by the experience of today.

(2) *When, if ever, shauld he be obliged to speak?*—Only in cases of crime and where justice would miscarry, if he refuses to tell the fatal secret. Let the criminal law court decide and relieve the doctor of his obligation of secrecy. In all civil suits let him be protected. But in crime there can be proper security for society if the doctor becomes a *particeps criminis* by concealing the truth.

The doctor, then, owes a primary duty to his patient, but he also owes a duty to society in cases of real crime. And whenever the courts clearly see that he holds the key of a vital fact in the prosecution, he may be required to speak. How carefully must this be administered? How ardulously guarded to secure justice to all? He who sits in the judgment seat must decide. When the physician should be called on to testify he ought to be extremely rare.

We hold, then, that the rules on priviliged medical communications should be amended in Massachusetts to conform generally to the law of New York.

No physician should be allowed to betray professional confidence, unless the judge of a criminal court decides that he must do so or impede the punishment of the criminal.

The Conservative Treatment of Appendicitis.

Dr. W. E. Fitch, in Georgia Journal of Medicine and Surgery, is of the opinion that we should operate as soon as the diagnosis is confirmed. That non-operative treatment is justifiable only when the consent of the patient, or those responsible for him, cannot be obtained. Ideal surgery, in the broadest sense of the term, is preventive surgery. The writer quotes from many celebrated authors confirming his statement that an early operation is conservative and the wisest method. Morphine and opium he condems bitterly, and I think he is correct.

Medicine as a Profession--Facts, Fallacies and Fancies About It.

A few notes from a well written paper in the Medical and Surgical Monitor by Walker Schell:

Goethe said medine is the most godlike all the persuits of men. It then should have only the choicest of spirits. "Hitch your wagon to a star" should travel upon this highway. Character is, after all, the measure of success. It is the only thing which men really respect. Wealth may bring one to a certain social position, may dazzle human mouths with its light and glamour, but if the getting of money be the chief object of one's life, the ideal is material and base. In that great struggle beginning with the cradle and ending with the grave, the only

really worthy object possible for us is the building of character. Education builds character, and medical education is largely responsible for ideals. He says:

Good manners rest upon a physician like a robe of purple. It is the royal robe. For purely business reasons, if for no other, let me advise you to cultivate the graces of life. Nothing will be lost if part of one's time is given to social duties. Medicine has so expanded as a science that it is impossible for any intellect to cover all the ground, yet, doctors should never wholly neglect polite literatue. The doctor should read the classics, and have them in his library. He should also know something of history and fiction, and the collateral sciences. Art and music should appeal to him. We are so constituted that the mind is at once rested and improved by broad culture. Monotonous toil wears out the brain and unfits us for broad and liberal training even in special lines. It is very gratifying to know that students entering upon the study of medicine are much better educated than those who sat upon the benches a generation ago. Education best fits one for effective work if not too narrow and special. A man all doctor is not a good one, and this is the reason that medical colleges have been raising the standard of preliminary education. This standard is nccessary in order to read and comprehend the textbooks. It goes without saying that one with a knowledge of Greek, Latin, German, French and Italian will enjoy and understand the literature of his profession much better than one who has not these attainments. The world has become very small and a physician who would lead the medical thought of his community must make the literature of the great civilized nations his own.

Further on in his paper he uses these words;

There is another thing you will learn when you are in practice if you do not know it already, and that is that men who publish cases and operations in newspapers are not all great men. They are seeking notoriety which they are not able to win by honest work. The late Judge William Mack—that "so and so is a great man, and the fact is, gentlemen, I know it, because he told me so." It is an old story that a man went into the forest and taught parrots to repeat the Apsethus, the Libyan, is a God. This may be the way to gain a clientele, but I do not recommend it to you. Honest, faithful work is the only sure and worthy way to win the respect of your fellows, and this is after all the greatest reward. Do not grudge any honest man success. Be generous and truthful, and so far as possible commend the work of others. I must congratulate the student of medicine on the splendid opportunities that are his in this day. Not long ago little was required in the way of preliminary instruction, and the period of instruction extended over only two short years of six months. There was little or no laboratory instruction and even clinical cases were presented to students on distant benches. The fault was in the system, for many of these lecturers were finely equipped, eloquent men, their work was well done in their day. Schools have raised their standards, and much money is spent to equip them.

Notes on Orthopedic Surgery.

Franklin Staples, M.D., (St. Paul Medical Journal):

In History Early aud Late.—From the time of Hippocrates to that of the modern period, physicians are known to have practiced in certain ways the art of treating deformities. It remained, however, for the 18th century history to afford definite accounts of work in this department of surgery, and this for various affections. It is given that a Swiss physician, J. Andr. Venel, (1740-1791), treated clubfoot and other deformities by means of apparatus. Credit for the first treatment of clubfoot by opperation, is given to a Hessian physician, Thilenius, (1745–1809), whose method was to make a wide, direct incision through the tendo Achillis. The treatment of the wound and the further management of the case do not appear. Means and methods at that time were rather of a primitive character, and modern asepsis in surgery was wholly unknown. The term orthopedics, as applied to this department of surgery, is certainly suggestive, and is credited to a Frenchman, Andry (1658–1712) a Professor at Paris. The word is from the Greek, *orthos*, straight, and *pais*, a child, or *pes*, a foot—a straight child or a straight foot, as you please. Dr. L. A. Sayre, in commenting upon the derivation and meaning of the term, suggested the following for a composition: *orthos*, straight and the Greek *paideuo*, I educate. He would have the term to signify, I educate or make straight. The propriety of the suggestion is evident.

Dr. Sayre is authority for the statement that the first special department of orthopedic surgery established in any medical college in the country was that in the Bellevue Hospital Medical College of New York City, at its opening in 1861. The same authority, in 1876, rejoiced in the fact that other institutions had followed suit, and

had made this a department in their courses of instruction. In the quarter of a century of advancement in the scope and character of college instruction in this country, the department of orthopedics has hardly kept pace with others, at least in its general extension. A recent effort to obtain facts and figures from medical schools concerning instruction in orthopedic surgery, resulted in some disappointment. Thirty-eight schools in all were reported as affording special instruction, either didactic or clinical, in this department. Of this number, 9 had effected this departure since the year 1887. It is true, however, that the whole truth is not shown in this statement alone. Long before the time first mentioned, instruction in orthopedics was afforded to considerable extent, either in special courses in medical schools or in more private ways, both in this and other countries. The late Dr. William Detmold, of New York, for several years delivered annually a course of practical lectures on clubfoot surgery, at the College of Physicians and Surgeons, N. Y.

Dr. Detmold, more than any other, has been credited with the introduction of clubfoot surgery into this country. At the same time, about the middle of the century and later Dr. Louis Sauer held his hospital clinics in Brooklyn in which the special work and instruction were in orthopedics. His practical work on the subject was published in 1864. "*Plastic and Orthopedics*" is the title of a work by Dr. David Prince, late of Illinois. The work was fisrt published in 1871. Dr. Prince maintained a hospital for work of this kind at Jacksonville, Ill. The comprehensive work of Dr. Sayre, "*Orthopedic Surgery and Diseases of the Joints*," first appeared in the centennial year, 1876. During the time that has passed since even the later dates mentioned, the means and work in restorative medicine and surgery have greatly advanced and are still advancing; but the good foundation, then laid, the value of which has increased with all the building, must remain. Recent valuable works are, "Whitman's Orthopedic Surgery," and "Bradford and Lovett's Second Edition." Medical colleges at the higher class now sustain chairs of orthopedic surgery, and the greater number of our medical journals either devote a share of space to orthopedics or have a special department for its current literature.

Enough of History.—We may venture now on a few practical points. 1st, The Enveloping Splint. The enveloping bandage splint has a large place in the past and present of orthopedic surgery. As a temporary retaining support for parts where deformities have been wholly or partly corrected by operation or ortherwise, its use has been indispensable. The material generally consists of gypsum, starch, salicylate of soda in solution, or other substance, which, applied in paste or fluid form, sets or dries quickly in the retaining bandage. Leather and such material as gutta percha have special uses, the former making a good fracture splint; the latter, softened by heat, is useful for small splints, as for hands and fingers. It has been successfully used, molded to the chin and jaw, in cases of fracture of the inferior maxillary. Much of the efficiency of the plaster splint depends upon its construction. The essentials are good material, skillful hands and painstaking, as follows: Fine plaster, not injured by exposure; bandage material of fine muslin, loosely woven and without dressing; warm water, to which is added a small quantity of common salt, and, when necessary for strength for certain parts, a few thin strips of wool veneering; and, withal, a good technique in the application. Next the skin is carefully fitted an elastic-knit material that will not wrinkle, fold or irritate. On this may be lightly drawn a single thickness of sheet cotton wadding. When the powered plaster is thoroughly incorporated in the bandaging, and the same loosely rolled and submersed, not too long, but until all layers are wet, the roll is squeezd to remove surplus water and applied. No unevenness or tightly drawn edge must exist. Extra moistened plaster may be applied sparingly between and outside the bandage layers, but must be thoroughly incorporated by handwork in the bandage. The object is to make a light and strong, not a heavy, crumbling cast. A few veneering strips, if thought necessary, may be used. To finish, the edges of the lining left exposed at the top and bottom may be reversed a short distance on the outside of the bandage, and secured by the plaster. A single layer of dry bandage is then applied and made to adhere. Dr. Sayre, whose expert work on the plaster splint has not been excelled, made a strong point on the thorough hand work done in pressing and gently rubbing in the moistened plaster, as the layers go on. He exhibited a plaster corset-splint at the Philadelphia meeting of the American Medical Association in 1876, which commanded attention because of its strength, lightness and some degree of elasticity.

Spinal Curvature—A Case.—The following case, although somewhat unique, because of the youth of the patient, may serve in a way for illustration: A child

about a year old, with incipient antero-posterio curvature of the spin at the lower thoracic region, was brought from the country for treatment. The child was still nursing, and its general condition appeared to be fairly good. Treatment was undertaken and carried on as follows: A fine knit covering was drawn on, extending from the shoulders to the hips. The ordinary method of extending the spine by complete or partial suspension of the body was in this case impracticable. After light inhalations of chloroform, traction of the body was made by two assistants, one grasping the shoulders and supporting the head, the other holding and gently drawing at the hips. The light plaster bandage, having been prepared to set quickly, was carefully applied. The child was soon free of its anesthesia, appeared none the worse for it, and was taken home for eight or ten days, when it was returned for another like treatment. At each change of bandage and renewal of extension, a mild alkaline bath and massage were used. This treatment was continued at gradually lengthened intervals for about seven months, when further extention was found to be unnecessary, and a laced corset support took the place of the plaster. The result in securing a normal condition and form of the spine was quite complete. Important essentials in securing the result in this case were, first, the opportunity for treatment in its formative stage; and, second, the continued support of the parents of the child, and the intelligent care of the case by the mother. To prevent some degree of permanent deformity and the accompanying evil results in case of spinal curvature, mechanical and other measures of treatment should be had in the early stage, before that of osseous hardening and fixation. In most cases, the enveloping splint is required for support during the early and middle stages; afterwards a suitable kind of apparatus comes into use to allow a certain freedom of motion. General supporting constitutional treatment is usually required.

Talipes and Tenotomy.—There was at one time a controversy as to the necessity for tenotomy in clubfoot. A prominent London surgeon advocated the plan of treatment by tension alone, without the division of tendons or other tissues. This doctrine had its adherents, but the opinion and practice of the majority was and has continued to be otherwise. The truth in this, as in most things, appears to lie between the extremes of opinion. In minor cases of clubfoot, as in newborn children, and others in which the parts have not become more or less fixed in deformity by osseous and fibrous changes, adhesions, etc., good results may be had without division of tendons. Manipulation, the retaining bandage, and the proper shoe may be made to suffice; but for anything more than that, tenotomy is required; and, properly done, is not objectionable. The indication is to lengthen the shortened tendon or other tissue, without destroying its integrity. Strictly subcutaneous and bloodless division, careful asepsis and the immediate use of the retaining bandage are the principal essentials. With a fine tenotomy blade in a skillful hand, the tendon may be divided without wholly dividing the sheath. The divided ends will draw apart, plastic effusion will take place, and lentgthening, without permanent weakening, may be the result. If it is found later that other fibrous structures require division, a second operation is in order. In an advanced case, with osseous structures deformed and fixed, the treatment may be to exercise one or more V-shaped sections of bone from the outside or elongated side of the foot, bring accurately together the divided surfaces, and so suture and support as to secure good reunion. At the same time, offending tendons and fibrous bands on the inside may be divided, care always being taken to avoid the injury of vessels, or otherwise to interfere with the circulation. Unnecessary injury is to be avoided. To do the wrong is hardly worse than to omit the right. If correct operative measures are important, so is the care that follows. Injury to tissues from faulty asepsis may not be readily repaired, but may be prevented.

In clubfoot surgery, generally, and frequently in other orthopedic work, the order is: first, the necessary operative measures, if any; second, the retaining bandage, continued while necessary, and finally, the suitable, light, well-fitting, movable apparatus, for its term of service.

Wm. J. Mayo in Philadelphia Medical Journal, discusses the question of carcinoma of the cecum and reports two cases in which the cecum was removed for malignant disease. Ewald has collected 1148 cases of intestinal cancer, and in 64 instances the disease was situated in the cecum and in 26 in the ileum. Lymphatic infection is found in less than one-half the cases dying from intestinal carcinoma. The malignant growth usually originates at the ileo-cecal junction and has a tendency to produce obstruction. The symptoms of the disease are colickly pains, constipation alternating with diarrhea, and progressive wasting. Sometimes the tumor may be felt. It is very difficult to make a differ-

ential diagnosis between malignant disease of the cecum and a chronic appendicitis. Occasionally the symptoms come on suddenly, being ushered in by an attack of acute obstruction of the bowels and in other instances by an acute intussusception. Both tubercolosis and syphilis may produce inflammatory thickening of the cecum which will render diagnosis difficult. Mayo recommends the formation of an anastomosis between the end of the ileum and the side of the colon above the seat of disease and then the extirpation of the cecum. If it is found difficult to proximate the cut end of the cecum and the side of the colon, then a side-to-side anastomosis between the ileum and the transverse colon may be made. Mayo has excised the cecum four times, twice for malignant disease, once for tuberculosis, and once for chronic intussusception. All of the patients recovered from the operation. His first case of carcinoma of the cecum was operated upon in April, 1899, and is now pursuing his avocation, In this case a diagnosis of chronic appendicitis had been made. The second case was operated upon in January, 1901, for carcinoma of the cecum. In this case also the condition was believed to be one of chronic appendicitis.

Erysipelas.*

W. L. Smith, M. D., (New England Medical Monthly.)

I practiced medicine seven years before I lost a case from sickness. Had a few cases to die from injuries but in my opinion they were beyond the reach of a physician. I lay no claim to any special talent or better qualifications than is possessed by my fellow practitioners, but I believe my success has been due to my personal attention at the bedside of every patient needing special attention.

It is by watching the effect of medicine that enables us to tell just how much to give. We can no more follow conscientiously, any prescribed course of treatment for the same disease in different people than we can recomend a patent nostrum which is the same dose and treatment for everybody and almost for everything.

Compared with what there is to know and what I have yet to learn I realize that I am only an atom in the intellectual world as it is applied to medicine. However, I do not know that if I were the patient of some physicians I read after in my medical journals and was suffering from a disease so common and so simple as erysipelas or chills, and many other simple ailments I would certainly have a kick coming.

I have no regular treatment for anything, but, of course, frequently use the same treatment in different cases where the same drugs are indicated, but may use a different size dose or more or less of them. A physician ought to study his materia medica and give whatever is indicated. Common sense taught me atropine would be good in croup long before I ever saw an account of its being used, yet I have never had occasion to test thoroughly its merits; it might be the atropine, or belladonna, stopped, the croup in my case *right now* and I thought it only a mild case of the disease.

I believe it was Bill Nye who said, "if I were a physician I believe I would treat the patient and not the disease." There is considerable truth in his view of this habit physicians are getting into of making diagnosis of different cases and prescribing the same medicines, doses and all, for each case.

I have long since found out that formulas only suggest combinations of drugs recommended and that it was necessary to change them by adding to them certain other medicines or else by taking something out, or change the dose. *Every doctor ought to have a head of his own.* When I first began the practice of medicine I thought like most all young physiciana do, that I was well up and only needed a chance to show the people if I were not the only pebble on the beech. I was, at least, as slick as any of them. Eight years' of experience has taught me I know but little and that little I am almost ashamed of. However, I have something to say anent the treatment of erysipelas. Now I have not treated thousands of cases, neither have I treated hundreds of them but I have had no less than a dozen.

I did not treat them all just alike. Some I gave iron, to others I did not; iron, in my opinion, is never indicated unless the patient is very anæmic and not even then if constipation exists. I do not believe in intestinal medication other than a saline purge, I rely upon collodion two parts, castor oil one part, mix and smear over the skin covering it at least two inches beyond the area of the disease. This produces an artificial skin over the inflamed area and excludes the air; it stops the spreading of the disease as soon as applied. Have never had a case to spread a hair's breadth after the first application. I have a coating put on about every ten hours until the disease makes its disappearance. Be careful and not allow any cloth or the cover on the bed

*Authors Abstract.

to come in contact with the collodion and oil to absorb it away from the skin.

I have been called in consultation where the old-time treatment such as honey and flour paste, lead lotions and various other remedies had been kept up together with iron, internally and externally, for days and the disease still spreading but stopped as soon as the collodion and oil were applied. If the disease has been spreading very rapidly and is about to reach some orifice I use three parts of the collodion to one of the oil.

I have never had a case where the mucus membrane was involved but would, of course, have to change my treatment yet I would not waste time giving iron.

I live in a malarial district and not being an admirer of quinine I would like to hear from more of the brethern who have been trying thialion. I have never tried it, one objection is that it costs too much for a country physician to use, where he has to furnish his own drugs.

I may give in my experience with chills some time in the near future. Will say one dose of medicine is sufficient to break any case of chills, I care not of how long duration. Then just the right kind of a tonic should be given to prevent their return. Quinine should never be given to a person chilling unless the spleen is enlarged and not always then.

Sturmdorf in Philadelphia Medical Journal, reports the following case: A woman of 35 suddenly developed sore throat, cough and hoarsness. Her general condition rapidly deteriorated; a collection of glands appeared in the left submaxillary region, and the abdomen protruded greatly. Physical examination showed enormous enlargment of the liver and spleen; marked redudtion of the red blood corpuscles, great increase in the white blood corpuscles, and the characteristic changes in the blood of leukemia. There was also tuberculosis of the larynx, and the physical signs of tuberculosis of the right apex. There was considerable fever from time to time and the blood showed slight variations, The patient is still living, and a diagnosis of splenomyelogenic leukemia associated with tuberculosis has been made.

A Plea for the Consumptive.

Abstract of a paper read by John H. Fulgham, M. D., of Lebanon, Ill., at the Quarterly Meeting of the St. Clair County Ill., Medical Society, Sept., 5th, 1901.

The essayist alludes to the April report of the St. Louis Health Commissioner in which it is learned that out of a population of about 600,000 there are 1.353 deaths from consumption, and 10,000 cases in one year.

Reference is made to the prominence of tuberculosis in the mind of the medical world today, and is compared with the position occupied by smallpox a century ago, diseases of the ovary ten years ago, and appendicitis more recently, with the advantages of the enlightenment upon those subjects.

Six postulates are given:

1. Tuberculosis is always due to a specific organism.

2. This organism finds its home in inflamed tissue or where there is deficient blood supply.

3. It can live, but cannot multiply outside the body.

4. It has an affinity for a certain type of tissue: the tissue of the strumous.

5. Its first effect is local.

6. It is readily destroyed outside the body.

Tuberculosis is not an hereditary disease. The principal source of infection is infected air. There is no specific cure for the disease, and our best field of action against it is in prophylaxis.

Doctor must guard their clientele against infection,

Allusion is made to the good results from isolation in other diseases, smallpox, leprosy, yeliow fever, and it is recommended that sanatoria be established in each county for the care of the poor, and for their separation from the uninfected.

The doctor advised the sending of children of consumptives to regions where their strumous tendencies may be no menace to health, and where ample opportunity for earning a living are to be fonnd.

It is the opinion of the writer that in this section a physician is not justified in treating phthisis; nor on the other hand in sending a hopeless invalid away to die.

Special regard to the constitution in deciding on a location is necessary in order that the best results may be obtained.

For those who are infected, but who have not alarming symptoms, camping out in the mountains is advised, a dry atmosphere, with equable temperature, being sought.

Stress is laid upon the larger volume of air which the lungs must receive in the higher altitudes, and that it penetrates more deeply into the air cells in the affected area, and promotes a more active circulation and gives a greater power of resistance to disease.

Attention is called to the fact that it is

not cold weather, but damd, changeable weather, that favors consumption.

The writer believes that much gpod may be done by State and County Board of Health; and by educating the laity regarding the disease; that registration of those affected, and thorough disinfection of apartments after occupation by a consumptive, will be important aids in lowering the death-rate from tuberculosis.

Speech as a Factor in the Diagnosis and Prognosis of Backwardness in Children.†

Dr. Makuen:—The subject is one of more than usual importance and thinks than adequate provision has not been made for the large number of children who are backward in their studies. The diagnosis of backwardness is not difficult. All children who do not, can not or will not keep up with their classes must be regarded as backward, and they should have our most careful consideration. The prognosis in these cases is not so simple as we must take into consideration the inherent possibilities of each child and determine what his mental capacity would be under favorable conditions. It may be said without fear of contradiction, that freedom of speech is essential to the normal development of children. Speech is a tool of the mind and just as a poor tool may be responsible for faulty work, so is defective speech sometimes the cause of backwardness in children. A case is cited of a boy 19 years of age who could not speak, read or write intelligible, and he was unable to spell the simplest word. His expression was vacant and staring, and he was supposed, by his physician, to be an imbecile. After careful investigation it was discovered that one great barrier in the way of mental development was the lack of power of expression. The question arose as to what was the cause of the tardy development of speech. On examination it was found that the patient had a defective tongue. The genio-hyoglossus muscle was too short and thus prevented its normal action in the process of articulation. A simple operation was performed followed by a systematic course of training for the use of the tongue and the related organs in processes of speech. The boy who up to 19 years of age has supposed to be an imbicile is now one of the most successful real estate brokers in Philadelphia. After citing another case similar to the one above Dr. Makuen draws the following conclusions.

1. It is not always possible to determine at a glance the cause of backwardness in children.

2. Backwardness in children is not always due to a central lesion, but may be the result of arrested cerebral development due to some abnormality of structure in the peripheral organs.

3. A very common cause of backwardness in children may be some abnormality of structure in the peripheral organs of speech.

4. So closely are the speech centers related to the ideational centers of the brain that any impairment of the one generally results in a corresponding impairment of the other.

5. The best method of arriving at a proximately correct prognosis in cases of backward children is to apply to the speech test, or, in other words, to ascertain by careful study and experiment to what extent the faculty of speece may be improved, and it will be found that those who are susceptible to training in what may be called the refinements of speech are the ones for whom may promise the best results, and that possibilities for general development will be proportional to the capacity for speech development.

†Abstract of a paper, by Dr. G. Hudson-Makuen, read before the Section of Diseases of Children in June, 1901, of the American Medical Association.

Disinfection of Infected Typhoid Urine.

N. B. Geoyn (Philadelphia Medical Journal): From the fact that infection of urine in typhoid fever occurs so frequently, and the probability that the disease is spread more by this means than by any other, the author has been prompted to investigate the disinfectant powers of the most commonly used disinfecting agents. Various urines, of different reaction, albuminous and otherwise, were collected sterile and infected with the typhoid bacillus; rapid growth of the organism usually took place. Measured quantities of disinfectant were added to measured amounts of urine, and plate cultures made from the mixture at stated intervals. The results may be briefly put, as follows:

Milk of lime hardly deserves the name of a disinfectent, being apparently never effective under one-half hour, even if equaling the infected urine in amount. Carbolic acid is of use only in large amounts, and in strong solution if a speedy result is wished. Formalin is hardly serviceable on account of its cost, but is nevertheless an efficient disinfectant. Bichloride of mercury, chlorinated lime, and liquid chloride, are of real value, are rapid in their action and are efficient in comparatively dilute solutions.

To summarize briefly the results, one may say that—

1. For disinfection immediately and within 5 minutes, a volume of infected urine would require

½ of its volume of 1 :20 carbolic acid sol.
2-3 of its volume of 1 :40 carbolic acid sol.
1-5 of its volume of 1 :1000 HgCl solution.
1-10 of its volume of 10% formalin.
1-40 of its volume of chlorinated lime sol.
2-5 of its volume of liquid chloride.

2. For disinfection within 5-15 minutes, a volume of urine would require

2-3 of its volume of 1 :20 carbolic acid sol.
½ of its volume of 1 :40 carbolic acid sol.
1-20 to 2-0 of its vol. of 1 :1000 HgCl sol.
1-5 of its vol. of 1% formalin.
1-5 of its vol. of 5% formalin.
1-5 of its vol. of 10% formalin.
1-40 of its vol. of chlorinated lime sol.
3-10 of its vol. of liquid chloride.

3 For disinfection within one-half to one hour, a volume of urine would require

2-10 to 4-10 its vol. of 1 :20 carbolic ac. sol.
2-5 its volume of 1 :40 carbolic acid sol.
An equal its vol. of 1 :100 carbolic ac. sol.
1-40 its vol. of 1 :1000 HgCl acid sol.
1-20 its vol. of 1 :1000 acid solution.
1-10 its vol, of 10% formalin.
3-10 its vol. of 5% formalin.
½ its vol. of 1% formalin.
1-10 its vol. of liquid chloride.

Carcinoma of the Tongue.

W. H. Chambers, Hill City, S. D.. (St. Louis Medical Review) reports ten cases gleaned from the literature. He repeats the remarks of Dandridge, of Cincinnati, as follows:

Sufficient experience has been accumulated to show that the removal of the tongue in lingual carcinoma prolongs life and adds to the comfort of the patient and further renders a reasonable hope of a permanent cure. All operations should be preceded by an effort to secure thorough disinfection of the mouth and teeth. In the treatment of continued ulcers and sores on the tongue, caustics are to be avoided and all sources of irritation removed. Persistent sores on the tongue should be freely removed by the knife or scisors if they resist treatment. When the disease is confined to the tongue Whitehead's operation should be employed for its removal. In this operation the advantage of primary ligation of the lingual artery is not definitely settled, but the weight of authority is against its necessity. The advantage of having one-half the tongue in unilateral disease must be considered undetermined, but the weight of positive experience is in its favor. In splitting the tongue into lataral halves, Baker's method of tearing through the rache should be employed. A preliminary tracheotomy adds an unnecessary element of danger in the removal of the tongue of ordinary cases. When the floor of the mouth has become involved or the glands enlarged, Koch's operation should be performed, omitting the preliminary tracheotomy. Removal of the glands by a separate incision after the removal of the tongue must be considered insufficient. Volkmann's method still rests on individual experience. Its just value cannot be determined until it has been subjected to trial by a number of surgeons. Thorough and complete removal should be the aim of all operations whether for limited or extensive involvment. By what method the tongue is removed, the patient should be up and out of bed at the earliest possible moment and should be generously fed.

How Do You Treat Habitual Constipation?

S. A. Knoff, (New York Medical Journal.)

The writer offers the following therapeutic measures to combat habitual constipation: First. Educational Means; second, Mechanical; third, Hydrotherapeutic; fourth Electrical; fifth, Dietetic; sixth, Medicinal.

In a patient who has not had a movement of his bowels in several days the writer suggests calomel as the best remedy to give. It is best given in small doses according to the age of the patient. When given in small doses you give only so much as will be ingested and salivation is less likely to occur. It is best given half hour after a meal. The diet the previous day should be mild and more or less liquid. The educational means to overcome habitual constipation should be inaugurated early in life. Children as well as grown people should be taught the absolute necessity of going to stool at a regular time each day. Plenty of time should be taken in the act. No reading should be done at this time, his whole mental and physical energies should be concentrated on the accomplishment of this function. The pregnant woman should be impressed with the importance of not allowing constipation to become chronic with her.

"Under hygienic treatment of chronic constipation I understand: *a*, To clean the teeth after each meal with the aid of toothpick, brush, and clean water; *b*, to have diseased teeth promply treated; *c*, to take meals at regular times; *d*, to take time for meals, eat slowly, and chew the food well; *e*, not to read or do difficult thinking while eating (light, pleasant conversation, on the other hand, is to be recommended; *f*, not

to eat in workshop or office; *g*, not to eat when tired or exhausted from either physical or mental work, but whenever practicable rest in a sitting or recumbent position from half an hour to an hour before the principal meal, either in the open air or in a well ventilated room; *h*, not to begin to work mentally or physically immediately after eating, but rest, if possible, at least from fifteen to thirty minutes; *i*, to use a water-closet which is well aired, well lighted, cool in summer, comfortably warm in winter; *j*, to use soft toilet paper and, whenever possible, some water to clean the external anal region."

In the way of mechanical means, the writer suggests walking and deep breathing in the open air, but never when tired. All outdoor sports are recommended when not carried to excess. Massage in this trouble is of great importance, also circular friction and kneeding about the umbelicus from right to left. Of the hydrotherapeutic means to overcome constipation we have internal and external measures, or both combined. He does not recommend hot water enema as routine practice. Water taken internally in one-half tumbleful every half hour after a meal is a most valuable remedy in such cases. Electricity is mentioned and may be applied in some cases with advantage Under dietetic treatment is understood the use of more fruits, liquids, vegetables, &c. He emphasizes the fact that all contipated patients should avoid the use of alcoholic drinks. Constipation in children should receive particular attention in regard to their diet. Too starchy, nitrogenous and saccharine foods should be prohibited.

Of the medicines mentioned calomel in fractional doses comes first. Olive and castor oil are recommended, also the different salts of potassium and sodium.

Of the vegetable laxatives cascara-sagrada is perhaps the best. For children syrup of manna is an unusually good preparation.

So much for the treatment of constipation. It all goes to show that we must "treat the habitually constipated patient, but never the habitual constipation."

Treatment of Certain Purulent Conditions of the Antrum of Highmore Through the Natural Openings.

Dr. N. H. Pierce (Laryngscope, September, 1901); After describing the position of the ostium the author directs the attention to what Zuckerkandl calls the accesory openings into the Antrum of Highmore. They may be situated in any region of the middle meatus but are most frequently found in the region of the hiatus. According to Zuckerkandl, these openings occur in about 10% of the crania he has examined. Hartman believes they are more frequently found in diseased than in healthy antra. The author uses a Moritz Schmidt canula attached to a bulb syringe, which in turn is attached to a gallon percolator jar. The technique of the procedure is as follows: After a thorough use of cocain and adrenalin solution, with the patient's head inclined somewhat backward, the canula is introduced into the nose under illumination, with the point of the canula directed upwards; when it arrives opposite to the middle of the middle turbinated body the instrument is gently insinuated into the middle meatus, and the ostium or an accessory opening felt for. When the point passes into the antrum sight and touch make us aware of the fact. We then have the choice between aspiration, inflation or irrigation of the cavity. For diagnostic purposes the latter procedure is the best, as the secretion may be very slight or thick. All fluids used should be steril and bland. Thiersch's solution is recommended. It is not to be treated through the natural openings, nor that all cases so treated will recover without further surgical interference. After quoting several cases of chronic and acute inflammation of the maxillary antrum which recovered under this mode of treatment, the author concludes:

1. That there is strong evidence to warrant the belief that in diseased antra accessory openings are more frequently found than in health antra.

2. That in a certain number of cases the ostium may be used to irrigate the antrum.

3. That we should in all cases, whether for diagnosis or treatment, try for the ostium or accessory openings before resorting to surgical puncture, whether the inferior or middle meatus, the canine fossa or alveolar process.

4. That it is of no importance whether the opening through which we irrigate be the ostium or an accessory opening.

Removal of the Female Urinary Bladder.

Mann (Buffalo Medical Journal) concludes that cystectomy, or total extirpation of the bladder, offers no serious difficulties to an experienced abdominal surgeon and is a justifiable operation in certain cases of malignant disease of the bladder. He has had two cases, in both of which recovery occurred from the operation, and has collected fourteen other cases from the literature. The diagnosis of malignant disease is made from the symptoms, the cystoscopic and urinary examination and palpation.

Operative treatment includes removal of the growth and its base, resection of a part of the bladder or cystectomy. The indications for total removal are multiple growths, recurrence after removal, extensive involvments of the base, and extension of carcinoma of the uterine cervix into the bladder. The ureters require no attention during the operation, as by the removal of a part of the anterior vaginal wall they will discharge into the vagina. If possible, the uteral orifices should be left intact; but this is rarely possible. The vagina may be utilized as a receptacle for the urine, in which case there is much less danger of infection traveling to the kidneys, as often occurs in utero-intestinal anastomosis. In operating the Trendalenburg position is used, the peritoneum over the bladder is cut, the bladder enucleated by the fingers, and the base, with anterior vaginal wall attached, is removed. The uterus is then removed and the peritoneum closed over the floor of the pelvis.

Wounds of the Thoracic Duct Occurring in the Neck--Report of Two Cases--Resume of Seventeen Cases.†

Injury to the duct occurs, first, as the result of diseased processes, such as tuberculosis or malignant growths; second, from serious traumatisms, such as fracture of the spine; third, accidental wounds of the neck; fourth, operative wounds. The first two varieties are usually abnormal or thoracic, the last are usually cervical, and on the left side, no right sided injuries having been reported in anomalous cases.

Two operative injuries are reported for the first time. Case A., Boy. 16½ years. During a dissection for tuberculous glands of the neck on the left side, the thoracic duct was injured. Chyle spurted up in the wound for a distance of 5 to 7 cm.. doubtless due to the fact that the patient had received a full meal an hour and a half before operation. The wound in the duct was completely closed by a single fine catgut suture. The operative wound was closed except for a little drainage at the lower end which was removed on the third day. There was no leakage subsequent to the suture of the duct.

Case B., Woman, 52 years. Recurrent carcinoma of the breast, secondary dissection for subraclavicular glands on the left side. Injury of the duct not suspected at time of operation. Wound drained and partially closed with sutures. Chylous discharge first noticed on the fourth day. Treated by packing with idodoform gauze. The discharge was slight, but lasted for 18 days.

Brief abstracts of 15 additional cases are given, making 17 cases in all, comprising, it is believed, all the cervical injuries of the duct reported up to the present time. In these, 15 were the result of operative injury, and 2 were the result of accident.

The anatomy of the duct is next considered. This is of importance with reference to two points: first, the relation of the duct in the neck with reference to preserving its integrity in low cervical dissections; second, the anatomic distributions, commonly spoken of as its anomalies, through which collateral circulation may take place in case the duct is irreparably injured. Normally the duct reaches 3 to 3.5 cm. above the upper margin of the sternum. but has been known to reach as high as 5.5 cm. In several of the reported cases the duct reached 4 to 5 cm. above the sternum. Anomalous distribution of the duct, and especially multiple terminations are very numerous, and the anatomic probabilities of adequate collateral circulation are very strong. Histologically, the presence of a large amount of elastic tissue explains the spontaneous closure of the duct by contraction reported in animal experiments and several clinical cases.

Several considerations in the lymphatic system are of marked importance. Electrical contraction of the duct has been observed in hanged criminals as long as 1 1.8 hours after death. Animal experiments have shown that incised wounds of the duct are sometimes closed spontaneously even under considerable pressure. Complete closure of the duct by pathological processes has been observed in which the nutrition was apparently unaffected and collateral circulation complete. Even in animals ligation of the duct results in rupture of the receptaculeum chyli in but few instances. It has been shown experimentally that absorption of albuminous material is apparently uneffected by ligation of the duct, and that a good degree of nutrition can be maintained. Only about 1% of the total absorption of carbo-hydrates occurs through the lymphatic circulation, while the absorption of fat occurs almost entirely through the medium of the thoracic duct This fat absorption is apparent in the lymphatic circulation within a short time, probably less than an hour after ingestion reaches the maximum in animals in about 7 hours, and continues for about 30 hours. The presence of fat in lymph forms this distinction between lymph and chyle, the amount of fat in chyle

†By Dudley P. Allen, M.D., and C E Briggs, M.D., of Cleveland. (Abstract prepared by Dr. Briggs at the request of the Editor, from original article in American Medicine, Sept. 14, 1901.)

being about 5%. It is present in a minute state of subdivision resembling amorphous urates, and possesses "Brownian" movements. Spontaneous coagulation is due to the fibrin of the small amount of blood usually obtained with the fluid; pure chyle does not coagulate. The most careful examinations of chyle recorded are those of Whitla and Hay.

A detailed analysis of the 17 reported cases is made. In 11 cases, only, was the injury demonstrated beyond a reasonable doubt at the time of operation. In 8 cases the subclavian and internal jugular veins were exposed, in several of which the veins themseves were injured. In only 4 cases was the anatomy of the duct satisfactorily developed. Where the injury was noted at the time of operation the discharge was profuse in only 4 cases, but under considerable pressure in 2 cases, and was chylous in character in 5 cases. Where the injury was not suspected unfit after operation the discharge was observed from the first to the tenth day. In only 3 cases, unfortunately, was careful microscopical examination of the fluid recorded.

The treatment of the 11 injuries recognized at operation was by suture in 4 cases, by packing and ligation in the remainder. Cases treated by packing continued to discharge for varying lengths of time, the longest being 15 days. Cases of injury recognized subsequent to operation were treated by packing. In one case this was immediately successful, but in the remainder the discharge continued for varying periods up to 18 days. In these cases the discharge continued where light packing was used, but was immediately controlled by firm packing. Secondary operation was required in 3 cases before the discharge was controlled. Constitutional effect due to lymph discharge was evident in only 3 cases. The prognosis was very favorable in the series, there being only one death, and that bearing no apparent relation to the injury of the duct.

The various recommendations for treatment of such injuries are considered. Suture of the duct is the most desirable when possible. Where this is not possible, accurate, firm gauze packing is best employed. Study of the cases justifies the belief that it will control the discharge in all cases, though, of course, this will not be accomplished immediately in every case. Other recommendations with their objections are also considered.

The question of subsequent enteric treatment is of the utmost importance. From the physiolgoic standpoint the indications for feeding are very direct, the nourishment being confined solely to proteids with the possible addition of a small amount of carbohydrates, to the exclusion of all fats. Properly prepared beef juice and egg albumen meet the requirements most rigidly. Centrifugalized milk contains no fat, but a moderate amount of sugar and is not objectionable. Oysters, fish, and raw vegetables may be subseqently used. In this way the material passing through the thoracic duct may be reduced to a minimum and at the same time the nutrition be satisfactorily maintained.

The physiological conditions already mentioned afford one other practical suggestion. The resemblance of lymph to serum doubtless explains the failure to recognize these injuries at the time of operation in so many of the cases, whereas the appearance of chyle is so distinctive that even a small amount is readily detected Increased lymphatic pressure will also doubtless indicate slight injuries overlooked at the time of operation, becoming apparent only by the subsequent accumulation of fluid after the resumption of feeding. Low lymphatic pressure and the absence of chyle are the two most favorable conditions for overlooking a wound of the thoracic system. These two objections can be obviated by the induction of fat absorption during operations in the neighborhood of the thoracic duct. The increased possibility of lymphatic injury under such conditions would probably be very slight owing to the small size of even distended lymphatics. The question of lymph pressure must be met either at operation or soon after, and it seems preferable that that pressure should occur at a time when its effects can be observed and corrected immediately if necessary, rather than later when its effects must be met blindly by inaccurate packing or subsequent operation, These requirements seem to be most satisfactorily met by the use of a small quantity of cream, perhaps 2 or 3 ounces. Absorption of fat would not begin until the material had passed out of the stomach, and from previous experiments it is safe to assume that the stomach would be completely emptied of this amount within 3 hours, after which no possible objection could be raised to the procedure from the standpoint of the anesthetist.

In conclusion, the following suggestions are made:

First. The increasing frequency of extensive dissection In the neck makes it desirable to consider means of avoiding injury to the thoracic duct.

Second. It is desirable that if wounds of the thoracic duct or its branches occur, they should be recognized at the time of

operation. The result in Case A makes evident the advantage of such early recognition. As this case was operated upon after a meal, it suggests the ingestion of 4 to 6 ounces of cream 3 hours before operation. This might be epecially desirable in secondary operations undertaken for the purpose of locating the point of injury. The desirability of such a procedure may be further studied by observations made upon animals.

Third. That suture of the duct with fine silk or catgut be accomplished where possible; that all small discharging iymph radicles be ligated; that the ligating and clamping of lymphatic vessels of considerable size be avoided, unless the integrity of the thoracic duct itself has been demonstrated; that where suture of the duct or large radicles is impossible, gauze packing, firmly and accurately applied, be used; that the head and neck be kept at rest, the use of morphine to a considerable degree being recommended if necessary.

Fourth. That unless repair of the duct is thought to be complete, nutrition should be sustained on albuminous material, with possibly a small amount of carbo-hydrates, but with an absolute exclusion of fats.

References, see American Medicine, Sept. 21, 1901, Vol. 2, No. 12, p. 447.

Chronic Gonorrhea and Marriage.

Weiss (N. Y. Med. Rec.) calls attention to the fact that the time at which the gonococcus should be looked on as definitely extinct is still an unsettled question. All parties agree that the gonococcus must be destroyed in order to effect a cure. In chronic gonorrhea the favorite hiding places for the micro-organism are the subepithelial and connective tissue, the glands of Littre, the follicles of the prostate and the seminal vesicles. The scanty discharge of chronic gonorrhea' if examined by the microscope, will be found to contain mucus, pus, epithelial cells and perhaps a few ill defined gonococci. Regarding the question of marriage in cases of chronic gonorrhea, it must be borne in mind that absence of gonococci from the shreds found in the urine is not evidence that the disease is cured. With the knowledge that the micro-organism may be, and probably are, deep seated, an irritating injection of a 2 per cent. nitrate of silver should be applied. A reactive irritation will follow with a more or less profuse purulent discharge. If there are any gonococci lurking in the glands or subepithelial tissue they will appear in the discharge produced by this irritating injection. Another procedure much more exact and positive in the information it supplied is to make a culture from the discharge, using as a medium human chest serum-agar. As the matter stands at present there are two views regarding chronic gonorrhea and permission to marry, *i. e.*, that of those who advocate the decision of the question on a purely clinical basis, and that of those who hold the opinion that only microscopic and bacteriologic examination should be decisive. The author contends that the latter is the only true and scientific position to occupy. In conclusion he states that permission to marry should only be given when after repeated and careful miscroscopic examination of slide specimens, and an exhaustive miscroscopic and bacteriologic investigation of the threads and secretion from the prostate have failed to demonstrate the presence of the gonococcus.

Prolapsed Kidney.

Agustus H. Goelet in the Philadelphia Medical Journal says that prolapsed kidney may be suspected when any of the following symptoms are present, viz:

Chronic digestive disturbances; such as gastric irritability, persistent intestinal distention, repeated bilious attacks etc.

Nervousness, restlessness and insomnia, without other ascertainable cause.

Usual fatigue on exertion; particularly after standing or walking.

Palpitation of the heart and sometimes vertigo or syncope.

Epigastric pain, to the left of the median line, or pain over the region of the heart.

Dragging pains in the loin, extending to the groin and down the thigh, agravated by long standing or walking, which is usually relieved by assuming the recumbent position.

Inability to rest comfortably or sleep on the left side, because the right kidney, which is most often prolapsed, drags towards the opposite side out of position when the sustaining pressure of the abdominal contents is removed by gravitating to the opposite side.

Irritability of the bladder, more pronounced during the day or after standing or walking. This usually disappears (though not always) after resting for a time in the recumbent position.

Jaundice which is transient and intermitten; due perhaps to temporary obstruction of the common bile duct from traction upon the duodenum and head of the pancreas and interference with the return circulation through the superior mesenteric vein.

Pain and tenderness over the region of the appendix, simulating chronic appendi-

citis; and tenderness upon pressure along the course of the ascending colon.

Pain in the right ovarian region which is sometimes misleading in the absence of other symptoms directing attention to the kidney.

Acute attacks of pain resembling renal colic. These attacks, which are fortunately infrequent, are no doubt due to obstruction of the ureter from flexure upon itself or kinking as the kidney drags down, or from pressure upon the ureter by accumulation of feces or gas in the ascending colon.

Look for prolapsed kidney in every gynecological patient, whether they have symptoms directing attention to the kidney or not. It will be found in 25 out of every 100 women taken at random.

Smaller Medical Colleges.

The subject of medical instruction has been a fruitful theme for discussion from the earliest inception of Medical Colleges in America.

William J. Gillette writes interestingly in the Philadelphia Medical Journal concerning the smaller medical colleges.

The writer shows that there is a tendency afloat to destroy the smaller institutions of the country which is entirely wrong and uncalled for. As he says "By their fruits ye shall know them.'

Many of the great masters of American medicine, the great pioneers have hailed from small medical colleges. It is not the college but the man, where a college is doing good work, be it little or large, let it alone, uphold it, encourage it.

After all, as Carlyle has said: "It is not thy works which are all mortal, infinitely little, and the greatest no greater than the least, but only spirit thou workest in that can have worth or continuance." Now this spirit of work and enthusiasm can be found developed in a small school as well as in a large one. Indeed, I am not sure but that it is as often found in the one as the other.

Concluding his article he says: my plea is not for the destruction of any of the schools of worth we now have, but for a recognition of merit wherever found, whether the college be large or small; for a higher standard of excellence in both, to the end that American Medical colleges and their graduates may be recognized as they can be and will be—the peers of any in the world.

Uric Acid.

Frank Billings (Illinois Medical Journal) concludes that: (2) Uric acid probably does not exist in the blood in health. (2) Uric acid is probably formed in the kidney from two sources: (*a*) From urea interacting with some antecedent of urea, probably glycocine in the kidney. The large amount of uric acid excreted by birds and reptiles and the presence in the blood of these animals of urea and pot uric acid points rationally to this source of uric acid in these animals, and it is rational to infer that a part at least of the uric acid excreted by mammals, including man, is formed in the kidney in this way. (*b*) From the nucleins of the body by oxidation probably in the kidney. (3) That uric acid is not poisonous. That the presence of uric acid in the blood as the quadriurate or biurate probably means that it has been absorbed from the kidneys. (4) That defective kidneys are the cause of the accumulation of urates in the blood because of insufficient excretion. (5) That antecedent kidney disease is commonly formed in so-called lithæmic states which have often been attributed to the irritating effects of uric acid upon the kidney capillaries and the cells of the tubules. (6) That the lesions formerly attributed to uric acid are probably due to the toxic effect of the alloxuric bases. (7) That the presence of these lesions in the kidneys and in the connective-tissue elements of the body leads not only to accumulation of the urates in the blood, but also furnish a proper condition of tissue for the deposition of the urates as concretions in joints and fibrous tissues. (8) That the degree of alkalinity of the blood has no influence upon the presence of tha urates in the blood. (9) That the deposit biurate concretions cannot be redissolved out of the tissues by an attempt to increase the alkalinity of the blood and fluid by the use of alkaline medication. (10) That the presence of concretions of the urates in the body comprises the sum total of its pathologic effects. (11) That the so-called uric acid diathesis—the influence of heredity, the bad habitis of life, alcoholic indulgence, lead poisoning, etc.—consists in a condition or tendency to disintegrate a quantity of nuclein far in excess of the amount usually split up with resulting increase of uric acid and alloxuric base formation.

A Case of Epileptiform Convulsions Caused by Shoe Button in the Nose.

J. S. Steele, M. D., Monterey. Mex. (Laryngoscope Oct 1901):

"Man is wonderfully and woeful made" when a shoe button in a boy's nose will throw him into daily convulsions, often as many as six or eight a day, and if not re-

lieved make an idiot out of what would have otherwise been a very smart boy.

The case I have report is of a boy, "Master T.," age about six and one-half years. Family history good, has several sisters and brothers, one of which is younger than he, and all in excellent health. Master T. was brought to me November 12, 1900, for the purpose of examining and treating his catarrh, with which he had been suffering for about two years. He proved to be a fat, chunkey, well-nourished boy physically, with a rather large head, and large ball spots on back of his head, in the center of which there was a sore; this ball place and sore was caused by falling backward when he had a convulsion and continually bumping his head against the floor or ground during a convulsion. These convulsions made their appearance about two years before he was brought to me; at first they were light and not of frequent occurrence, but gradually grew worse and more frequent, until when I saw him they were of almost daily occurence and often as many as six or eight a day, and very severe. Before these convulsions made their appearance Master M., for his age, was up to the average in intelligence, but shortly afterwards his mind, instead of continuing to improve, began to show signs of weakness, which increased until when I first saw him he had almost forgotten how to talk, or would not talk, nor play with the rest of the children; in fact, his mind seemed almost a blank. When brought to the table he would with both hands grab for anything he could reach; he could not be controlled, and was almost always hungry.

Master T. had been treated by the best native doctors in mexico, and, no doubt, had taken almost everything in the pharmacopia reccommended for epilepsy and while under the influence of some strong nerve sedative would sometimes go as many as three or four days, but never more than five days, without a convulsion.

On examining his nose, both nostrils presented the appearance of a chronic catarrhal rhinitis, with a little enlargement of the middle turbinated bodies. In the left side, situated between the middle turbinated body and septum and at about the junction of the middle and anterior third, was apparently a black crust which failing to wash or wipe out, I removed with forceps quite easily, and to my surprise it proved to be a shoe button, which from its appearance must have been in the nose for a long time, for it was rough, the enamel being nearly all worn off. On inquiry found out that the boy had not worn button shoes for about two years, the last pair he was wearing when the convulsions first made their appearance two years before. The boy had never learnt how to blow his nose, yet there was very little fetid accumulation in this nostril, and after three days it was almost impossible to tell that there had ever been a foreign body in the nose. The nose was treated locally for his chronic rhinitis, with antiseptic sprays and applications of protargol, iodine, etc. At this time he was taking large doses of potassium bromide, which doses I ordered decreased until on the sixth day they were discontinued. The daily treatment of the nose was kept up. On November 28th the convulsions returned, but not so severe, yet were of daily occurrence for five days. On the fifth day I thoroughly cauterized the middle turbinated body at where button had been pressing with the result of again checking the convulsions until December 24th, when he had a very mild attack, also one on the 25th, which was the last he has had. I feel confident that he is entirely cured. About all the internal treatment he had was a laxative quite frequent and the infusion of valerian symptomatically. Masters T.'s mind began to improve shortly after the removal of the button, and, although not entirely well, he is very much better and on a good road to complete recovery. On June 22d I removed the right tonsil, it having become quite enlarged in the last two months. One characteristic of Master T.'s convulsion was that he would always fall backwards, and shortly before the button was removed would foam at the mouth and cry out a great deal. I was not fortunate to see the boy in convulsions, but from all the information I could get these convulsions were due to a reflex nervous irritation caused by the button in the nose, and not the obstruction caused by the button, which was much less than would be expected. In almost all the cases I have seen reported of convulsions caused by foreign bodies in the nose they were of a character pointing to the obstruction in the nose as the principal if not the sole cause of the convulsions, and not as in this case to a direct nervous irritation.

The father and mother were even more surprised than I that the boy had any foreign body in the nose.

It is resported that the disease chorea is very uncommon among the negroes, one celebrated physician having encountered but three cases in the negro race.

There are about 400 women pharmacists in the United States.

The Leading Editorials of the Month

Diagnosis.

We get the editorial below from The Journal of the American Medical Association. It is a good one, and should be read by all physicians. It teaches two things: find out what is the matter before thinking of what to give; and learn how to say openly "I do not know." The physician who is honest does not have to "hedge":

When called to a case, the young physician is apt to meditate more on what he shall prescribe rather than on what is the matter. As a student, he was, perhaps, more diligently occupied in copying the pet prescriptions of his favorite teachers than in noting the care with which these same teachers sought to impress upon his mind the importance of diagnosis and the fact that a correct knowledge of the disease process, its cause, and its natural course, must precede a rational therapy.

What the average practitioner thinks he wants, when, after a decade of practice, he attends a post-graduate school, is a knowledge of the new drugs and the latest method of treatment. He is satisfied with his ability to recognize typhoid fever, but has become discouraged because his last three cases died in spite of the treatment that had been so uniformly successful in scores of cases in years gone by. Had he made autopsies on his three cases perhaps he would have been surprised and shocked, and would have felt that his diagnostic, rather than his therapeutic, ability was at fault when he discovered no evidence whatever of typhoid, but an empyema in the one case, an ulcerative endocarditis in another, a tubercular meningitis in the third. Failure to make autopsies, lack of rigid criticism by consultants who are too prone to agree with the attending physician, and neglect of careful repeated examinations in all cases that are typical or in any way obscure, render a physician overconfident in his diagnosis; he often blames therapy, where the fault is that he failed to understand rightly the nature of the disease.

The ability to make a correct diagnosis is not entirely the result of native genius. As Cicero said about the making of a poet, the natural ability is of great importance, but the man of surpassing merit is he who joins to his native talent the power that comes from education. The man of quick perception, of logical mind, and with acute special senses may make a rapid and apparently intuitive diagnosis. But in its ultimate analysis such a diagnosis is the result of study of books, and of experience at the bedside and in the laboratory; it implies weighing of probabilities and close logical reasoning it is far from intuitive. This is the hard lesson to teach the young man who becomes discouraged as he ploddingly works over his case and still is unable to name the malady, or grows careless through his effort to work as rapidly as his preceptor or his superior. But practice in this line brings improvement as it does to the patient, who soon reads and plays at sight music that was at first entirely beyond his grasp.

Many diagnoses are made with positiveness. When technique is faultless one may at times be able to pronounce a case tuberculous, or to declare the nature of a fragment of a tumor, or the presence of fluid is proven by aspiration or a fracture recognized by crepitus, etc. Yet while the learned and trained physician is the most positive in his diagnosis when he is sure of his ground, no one is more cautious and guarded when positive signs are lacking, and no one more candid in saying, "I do not know." Some men never reach this high plane; others lack the courage to confess what seems to be ignorance. But the intelligent layman who has tried his physician and not found him wanting, is willing to accept this confession of limitation of human power; he recognizes the feebleness of human insight into the workings of Nature, and he waits patiently until the physician is ready to announce his decision. The physician who is honest in his diagnosis has nothing to retract; he is not obliged to "hedge."

The physician who has had impressed upon him early the importance of diagnosis, who realizes the diagnostic ability is not a gift but an acquirement, and who gives his opinion not prematurely and guessingly, but conscientiously and after full deliberation, may not be brilliant, and may add little to the world's store of knowledge, but he goes about doing good; he commands the respect of his patients and his colleagues, and is free from the stings of conscience that come through mistakes committed through haste and carelessness.

The Perilous Adventure of an Old Medical Book.

The editorial below gives an interesting account of what becomes of all the old books. When one thinks of the thousands upon thousands of books published yearly what becomes of them turns to a wonderful topic:

The problem of what becomes of all the old books has had a curious light thrown on it by a recent occurrence in Philadel-

phia. In a large paper mill in this city a great pile of waste paper was being psssed into a machine in order to be reduced to pulp. One of the proprietors who happened to be standiug by, saw a rather dilapidated old book on the heap, and picking it up observed that it was a Latin work on surgery. Thinking it might be of value, he rescued the old tome and brought it to the editor. It proved to be a copy of the second edition of the Latin translation of the complete works of Ambrose Pare. The title page was unfortunately torn out and the old vellum binding had been torn off, but otherwise the book was in excellent preservation. It was published at Frankfort in 1594, and its full title (which we have verified by comparing the book with the copy in the Library of the College of Physicians) is: "Opera Chirurgica Ambro'sii Paraei * * * A Docto Viro, plerisque locis recognita et latinitate donata, Jacobii Guillemeau, Francofurti, MDXCIIII."

The first edition of Pare's collected works was in French, publirhed in 1575 at Paris. There were at least twelve editions issued in the original French up to 1664, besides the editions in Latin, German, Dutch and English. The copy thus rescued from the maw of the paper machine cannot be considered extremely rare, but it is at least too venerable and too valuable a book to be ground up into bits. The query now arises, how did this aged book (more than three centuries old) find its way into a Philadelphia paper mill? Is this another case of imperial Cæsar dead and turned to clay? Has Ambroise Pare so fallen from his high estate that his venerable relics are to be converted into a few cent's worth of pulp? Think of it. Three hundred years of dignified Latinity sacrificed to make a piece of modern blank paper!

The Search for the Parasite of Cancer.

The search for the Parasite of Cancer has long been under consideration. Though innumerable attempts have been made from time to time to discover the parasites of cancer and smallpox, yet they still escape us. Concerning this subject the following editorial appears in the Philadelphia Medical Journal:

The problem of the discovery of cancer has occupied so much attention lately that there has been danger of forgetting the results obtained by accurate observers. It must not be forgotten that this problem, in spite of the work of Gaylord and Schüler, is perhaps not now much nearer elucidation than it has ever been. Parasites of cancer have been discovered so often by men who are apparently convinced of their absolute authenticity, that the modern sceptical medical man will require the strongest evidence and the most thorough confirmation before he is convinced Indeed it is not impossible that the problem will never be solved. It would seem the easiest thing in the world to determine the parasite of smallpox. The lesion is circumscribed and specific, and yet it still escapes us. The thousands and hundreds of thousands of sections, cultures and what not that have been made at the Pasteur Institute for the purpose of detecting the organism of hydrophobia, made with the most elaborate appliances, and by masters of bacteriological technique, have been utter failures, and yet, therapeutically, smallpox and hydrophobia are both, to a large extent, under our control.

Newcomb has done well to call our attention to the fact that the discoveries that seem most imminent are usually those that are never made, and he instances, as of course a mathematician would, the trisection of an angle, the squaring of a circle, and the doubling of a cube, and it may be that the discovery of the parasites of small pox, hydrophobia and carcinoma. It behooves us then to turn to clinical experiences in order to ascertain if possible what benefit is to be derived from the methods of treatment already in vogue.

The Advantages and Disadvantages of the Profession of Medicine.

To many the practice of medicine is looked upon as an easy, pleasant way of livelihood. To others its burdens and hardships are recognized. There are some pleasant features as well as the reverse about the practice of our noble profession as is shown by an editorial in American Medicine:

No doubt too many men enter upon the study of their profession without duly considering its advantages and disadvantages. We are too likely to be influenced by some trifling matter in the decision of questions of importance, and the choice of a life work is no exception to this rule. Too many enter upon the study of medicine influenced by the success of some one man who has risen to fame, public esteem, and possibly a handsome income. This leads the student to think that he would like to do something of this kind without his stopping to consider that such success demands special qualifications for its attainment, and that the chances of attaining it are comparatively small. Mistake in the choice of calling may lead to lifelong regret, to failure, and even to social and moral shipwreck. Therefore, such a step should not be taken without full

consideration of all that the profession has to offer, and the demands it makes upon those who practice it. The Educational Number of the Lancet deals with the qualification of the man himself that are likely to lead to success, while the editorial writer in the Educational Number of the British Medical Journal (August 15, 1901) points out the opportunities of the profession, and the rewards it is likely to offer. The question is considered from the physical, financial, intellectual, and social standpoint.

Considered from the physical standpoint, the profession of medicine has some decided disadvantages. The health of the practitioner is endangered from the incessant nature of his work, from the more frequent exposure to infection than most people, often when bodily resistance is at a low ebb, from the irregularity of meals, exposure to the weather, and fatigue. During the study of medicine the magnitude of the subject and the variety and difficulty of the work is so great that the keen, intelligent student is apt to suffer in health. On the other hand, the active life, especially the open air life of a country practitioner is, in many respects, almost as healthful as that of the agricultural laborer.

From a financial standpoint it may be said the competent practitioner is practically assured of a livelihood. A few doctors become what a business man would consider even moderately rich in the practice of their profession. Probably not 1% of all practitioners attain this measure of success. The pecuniary disadvatages are the prolongation and costliness of the training, the lengthy time of waiting with expenditure going on before a considerable income is received, and the large amount of working expenses for the house, carriage and dress, which is out of proportion to the earnings of a man in such a social position. The payments for professional services are apt to be tardy, and remuneration is inadequate, to say nothing of the results of keen competition and overcrowding.

From an intellectual standpoint the profession of medicine has more to offer, particularly to the man who is fond of dealing with facts rather than words. Medicine is based on progressive sciences, and therefore brings unfading freshness and interest to its followers. Its study is a most valuable training in scientific methods, in observation and reasoning on facts observed. In fairly well endowed persons there is nearly always a remarkable development of the special senses and of judgment as a result of medical study and practice. The little time that is left for study and thought is the only drawback, and the result is that many professional men often fall behind.

The medical man has little time for the culture of social amenities, and, according to the British editorial writer, his conventional social status is not high, though his influence is of the widest character. Perhaps with us the social standing of the doctor is somewhat higher than in England, though, as in other pursuits, every man is more likely to be estimated in this country on his individual merits. No walk of life offers greater possibilities for the development of the highest character. The ethical side of the nature of the medical man must surely develop from his experience in the mitigation of suffering, from the exercise of generosity and sympathy and cheerfulness. It is a rare kind of courage which never shrinks from meeting infection or from incurring large responsibility, though the reward in fame or money are not what are to be expected by those who follow other professions. The perseverance which refuses to yield to the enemy, cheerfulness under depressing circumstances, constant consideration of the feelings of others, are beautiful in themselves and in their effects. As a business proposition we doubt if most men of good ability will find a very adequate reward for the time and money invested, but if the opportunities for development of mind and character are considered, and the satisfaction that comes from the ability to relieve or abolish pain, medicine is not without its rewards.

A Therapeutist Gone Mad.

In the Hahnemannian Monthly we find interesting and instructive methods given as to the best way of getting rid of tape worm. It is high class matter. Here it is:

A German physician has proposed what he is pleased to call a *new* cure for tape worm. Had we not heard of it before—and proposed seriously, at that—we might have thought it new, or believed that the originator intended to perpetrate a tremendous joke on a serious profession. The learned author says, "Give the patient a small dose of the ordinary remedies, so as not to inconvenience him. As soon as the worm protrudes from the rectum, inject it with 0.01 of morphia or a solution of cocaine, after which the worm dies and is easily passed."

Just think of the above coming from a serious German savant! Surely it is just as easy to strke the worm with a shoe or something, and stun him, as he looks out of the anus, as it would be to inject him with the expensive cocaine, and run the

risk of his acquiring the cocaine habit—for, doubtless, worms have habits as well as habitats.

This new cure reminds us of an old device for killing potato bugs. The method was advertised as infallible. The purchaser received a small package which he was requested not to open until ready to use. Then he found two small blocks, with directions to catch the bug, put it on one block, and mash it with the other.

The Frequency of Gonorrheal Affection in the Male,

It is a prevalent idea among medical writers says American Medicine editorially that all men have suffered at some time during life from the effects of gonorrhea. We are glad to agree with American Medicine in controverting such absurd ideas. It says:

It has become fashionable within the last twenty years for medical writers to refer to gonorrhea as a usual occurrence in the male. One clinical teacher makes it a rule to ask his patient how long it is since he has had gonorrhea; another changes the phrase and asks how many times he has had it; one writer incidentally says that no man reaches adult life without passing through an attack of this disease; another remarks in passing that probably every man has suffered from it at some time during life. It may be noted that rarely does any writer upon the subject present figures covering the investigation of a large number of persons to substantiate the statements unqualifiedly made. It may also be noted that as a rule when such a statement is made in a paper that is read before a medical audience, it is passed by without disscussion and consequently acquires currency and credibility simply because it has not been contradicted. Now it is an undoubted fact that gonorrhea does not occur in all men. It is also an undoubted fact that no one can really say in what proportion of men the disease has occurred, for the simple reason that the collection of facts from a sufficiently large number of observers in regard to a sufficiently large number of men of all classes is a very difficult task. That it is a task which will be eventually performed with some degree of thoroughness and accuracy is most probable, for there will yet arise an investigator of sociologic problems who will go about it in the right way and who will have no preconceived ideas about it. Obviously the physician who makes a specialty of venereal disease in a large city is not the man to reach a thoroughly representative number of men in his investigations. That the class of men with whom he deals should all be infected at some time or other is not especially surprising; that he himself should be somewhat skeptical of denials from the only class with which he associates is not surprising. But there is a field for investigation that is beyond his ken. Until that field has been thoroughly investigated by candid and impartial observers we may be pardoned for refusing to accept, even tentatively, the doctrine of the universal occurrence of gonorrhea in the male.

What Does the Practice of Medicine Offer as a Life Work?

The life work of the physican is very beautifully expressed in an editorial in the Journal of the American Medical Association:

Under the present status of mdeicine in this country, what has medicine to offer as a life work? To the student deficient in preliminary training, and who must, in consequence, enter the only schools which will receive him, namely a poor one, the outlook is bad. Such a student begins the study of medicine with the idea of gaining a livelihood only. He has no conception of medicine as a science; no pleasure in the investigation of the many problems which confront the physician; only a half knowledge of the responsibilities of his calling; he can have no pleasure in scientific discussion and in fellowship with the best men of the profession; he will exist without social standing among the educated and cultured people of the community. He enters medicine to gain a livelihood, and he will find that his investment was a poor one.

To-day the status of medicine is such that he who would meet success must have a good preliminary education. The discipline of mind, the broad culture of a college education would be of great assistance to the student and to the practitioner. But if the student has not this training he should be able, as a minimum preparation, to pass the entrance examination of a good university or college. In addition, a reading knowledge of French and German is very essential to-day.

To a student so prepared who will spend at least four years honest work in one of our best medical schools, and supplement the medical course with a service of one or two years on the house staff of a hospital, medicine offers much.

To a physician so educated, who is energetic, painstaking, and thorough in his work and whose integrity is unimpeachable, medicine offers more than the law, theology or politics. As a practitioner his

life will be full of the most laborious and exhausting work. He will be much exposed to inclement weather, at all seasons of the year. His duties may interfere with his social and material pleasure. His sleep will be broken by calls to the suffering.

But to offset the discomforts which experience and fortitude lessen until he no longer considers them, he has the robust health and the sturdy character which open-air exercise and the constant battle with and frequent mastery of the fell destroyer bring him. In the city his duties may fall in more pleasant lines of work, for a metropolitan practice is attended with less physical discomfort than is that of a country practice.

Wherever located, a good physician has no idle hours. Work—good, well-directed, persistent work, such as a properly educated physician knows how to do—will distinguish him from the indolent and ignorant in medicine, as it will in all walks of life. Medicine to-day offers opportunities for work as it never has in the past. For him who knows how, there are many problems to be worked out. The alleviation of human suffering, and the prolongation of life are subserved not alone by attendance upon the sick but by every measure which will enable us to discover the cause of and prevent disease. Much remains still to be investigated, and it lies within the province of the practitioner, quite as much as in the field of work of the pathologist, to make scientific observations and experiments. The intellectual life of such a man is full. He has the pleasure of constant intercourse with scientific, broad and cultured people. His work gives him but little time for the so-called pleasures of society. But he is a factor in the community, honored, respected and loved by all who know him. Such a man working unselfishly, doing good work because he is interested in it, and not because he expects a fee for it, will perhaps not become wealthy. He will, nevertheless, have a sufficient income to make a comfortable home and lay by enough to keep him and those dependent upon him when old age shall have come.

There never was a time in the history of the world, probably, when medicine gave as much promise to the student of a successful career, as now. But he who takes it up as a life vocation, from sordid motives, or who is poorly prepared and improperly educated, will meet defeat in competition with the man who is a physician because he wishes to benefit mankind. The true doctor is a nobleman. Carlyle said of the profession: "He that can abolish pain, relieve his fellow mortal from sickness, he is indisputably usefullest of all men. Him savage and civilized honor. As a lord chancellor, under one's horsehair wig, there might be misgivings; still more so, perhaps, as a lord primate, under one's cauliflower; but if I could heal disease I should say to all men and angels without fear, En Ecce!"

Indiscriminate Surgical Operation.

We agree to some extent with the writer below in regard to surgical procedures which often take place unnecessarily, yet we must remember that there are conservative surgeons who adopt conservative methods of treatment, The American Practition. er and news in an editorial says:

Nothing impedes surgical progress so much as indiscriminate operating. There are two classes of indiscriminate operators: those who operate solely for pecuniary reasons, and those who operate because of a mania to do surgical work. These men do not hesitate to plunge the knife into any person, under any circumstance, regardless of consequences. The latter class is largely in the minority, but the dangers are relatively as great, for many of them have no control over themselves, and operate upon cases which the most insignificant tyro should be able to see were inoperable. This reckless surgery can not last long under the glaring searchlight of the public eye, because the American people are alive to the fact that there is a great deal of unnecessary operating done, and will not be slow to rebuke the men who do this indiscriminate work. These parasites of the profession are constantly on the alert for business and some of them have gone so far as to adopt and advertise that abominable practice of fee-splitting to secure business. This has resulted in much unnecessary operating. A brings B a case supposed to need some kind of surgical work; B examines patient; A has already notified him that there is a fee of one, three, or five hundred dollars for any operation; that these people are able and willing to pay liberally to be rid of the trouble, whether imaginary or real. The result is, if the patient be a womon with abdominal trouble they will remove the ovaries and collect the fee. If it is not a case of so much gravity, there will be some arrangement made by which the fee can be secured all the same, possibly an exploratory operation, and the fee collected. It may be simply leucorrhea, which could be cured by proper medication. The pseudo-gynecologist or surgeon examines the woman, looks wise, and says to the patient and doctor that nothing but curetting will cure her. The husband will stand nonplussed at the technical phrases, while the

poor woman shivers in mortal terror, awaiting the decision and explanation of what curetting means. Finally the woman is anesthetised, and in many cases the lining of the healthy womb is torn and lacerated in an unskillful manner by the curette in the hands of a man who is illy fitted to do such work, for there is no more dangerous and difficult work in surgery than curetting, and every cross-road surgeon is ready and willing to attempt it. No less authority than Dr. John B. Deaver has classified curetting of the uterus as one of the three dangerous operations, which are considered harmless by many physicians and surgeons.

The evil results of indiscriminate work are manifested in many ways; women are unsexed unnecessarily, abdomens are opened unnecessarily, livers are cut into that should not be touched, and humanity is maimed in a thousand ways and no benefit gained, and even death is frequently the result of these operations. It has not been many months since a pregnant uterus was cut into in this vicinity, but I am glad to say that the surgeon did not live in Louisville. This woman died. It would seem in this enlightened age that no man is excusable for opening a pregnant uterus without knowing that it was in that condition before doing so. There are but few conditions where the demand for exploratory operations are warranted, and in this case certainly the fetal movements could have been detected, as we understand the woman was five months pregnant. This case is mentioned to illustrate the extremes to which this reckless operating is carried. This young man, no doubt, had been emboldened by success in a case or two, and probably had he listened to his advisers this accident would not have occurred. We write this to admonish these reckless and indiscriminate operators. Davy Crockett's advice is good, "Be sure you're right, then go ahead." But do not fail to take all precaution necessary to insure the fact of being right.

The foregoing in no sense applies to the many learned, experienced and honorable surgeons and gynecologists in this country.

Cold Applications in Tetanus.

According to the Journal Amercian Medical Association the use of cold as a therapeutic measure in tetanus is not new but it hardly receives a mention it textbooks. Its application in former times has been rather a general than a local one, ice to the spine, for example, from which Carpenter has claimed extraordinary results. Of late years, since we have learned that the disease is in its incipiency a local one, and, therefore, that local measures are important it has been neglected, notwithstanding the fact that if it can be harmlessly employed in any case it ought to be possible to utilize it as a local remedy. The tetanus germ can not grow of sporulate at even a moderately low temperature, 55 F., and if it develops its toxins apparently at the point of entrance into the system, it would appear that a cooling application below its working temperature would be a rational therapeutic measure. Acting on this presumption Dr. Joseph G. Rogers, a well-known alienist, suggests prompt local injections, deep in and around the wound, of a 20 per cent. carbolic acid solution of glycerin with a 2 per cent. of hydrochloric acid added; and reduction of local temperature of the part by immersions in ice water or ice bags to the part. The first of these measures is based upon well-known intolerance of the germ to these agents, but the latter—the application of cold—is an excellent example of medical reasoning in therapeutics which it is strange has not suggested itself to others. He supports his opinion by reporting two cases, both of pronounced traumatic tetanus to all appearance, spasms involving all the trunk and limbs, which were successfully treated by cold applications to the wounded part. In one case relief was experienced in a few hours and the symptoms ceased entirely on the fifth day of the treatment, when the patient himself removed the ice bladders and a relapse followed. This was again treated as before and in a few days recovery was complete. In neither case were drugs or other local applications employed or apparently required. These cases occurred in the doctor's practice some years ago, and the treatment was adopted with a view of reducing the irritability of the local nerve terminals, and he was at the time satisfied with the theory and practice. In the light of present knowledge he is inclined to ascribe the results to the cold on the microbe, depressing its vitality, preventing sporulation and reducing the evolution and distribution through the blood of the poisons it generated. As a therapeutic suggestion Dr. Rogers' paper modestly put forth as it is worthy of consideration. There is no reason why the treatment should not be tried in every case of traumatic tetanus, not, of course, to the exclusion of other means, but as a possibly valuable and certainly innocuous adjunct.

The Effects of Eating Raw Meats.

The habits of people are strange. The eating of raw meat is a fair instance,

American Medicine speaks of this subject editorially as follows:

That uncooked meat should be eaten by civilized people, and to such an extent as to make it a matter of the highest national and economic concern between two of the most progressive of nations, would, at first sight, seem absurd, and yet the habit of the German people of eating raw pork brings about tariff disputes and economic wars with America. Thousands of microscopists are employed in Germany to prevent trichinosis. A tithe of the expense and trouble expended in preventing foolish people from eating raw meat would accomplish the result much more perfectly. And this under a Government both grandmotherly and greatgrandmotherly! Dr. Stiles finds that in 274 cases of trichinosis in America, 208 were Germans. The fact is of significance also as an illustration of the slowness of the acceptance of science by the people, and of how indifferent we may become in the matter. Among the most scientific people, and with a most perfectly organized profession, the simple and effective method of preventing the disease in question is ignored and intrest devoted to silly tariff and ineffective protective devices. Science has in many things outrun practical realization. There is needed a more determined effort on the part of the profession and of government to bring home to the people the knowledge as yet entirely too theoretic.

Can the Hepatic Functions be Stimulated Therapeutically?

Concerning this subject American Medicine comments editorially as follows:

The apparently well demonstrated fact that socalled cholagognes do not really stimulate the flow of bile, is no contraindication to their use according to well-established clinical observations, but merely demands a revision of the conception under which these cathartics are administered. These remain numerous autotoxic conditions, mainly occurring in connection with that extremely common disease, hepatic sclerosis, in which the definite indication exists to stimulate hepatic excretion of solids and the vaguely understood function in the line of catabolism of nitrogenous waste ultimately through the kidneys. As to the glycogenic function of the liver, too little is known. A third indication for a true cholagog is cholelithiasis, and here the need is of a hydrogog rather than to increase the elimination of solids. Some German experimenters have maintained that salicylates, especially of sodium, genuinely increase the flow of bile. Others have claimed a similar action for sodium phosphate, but with less positive evidence, and not a few dispute both claims. Clinical experience, however, seems to show that the salicylates acts as true cholagogs, and increase the solids of bile and aid in the elimination of gallstones. But better than any drug in stimulating glandular activity, is water. We can scarcely conceive of glandular tissue within the living organism, so inerta tht its cells will not excrete or at least, allow to filter through into the acini, an excess of water in the afferent vessels. Naturally, the secretion is more dilute than normal, but there is absolutely an increase of solids as well as of water. In renal failure this method is often conspicuously successful, indeed it is almost the only method worthy of serious consideration, so far as an attempt to stimulate renal excretion itself is concerned. Transferring the problem to the liver, it is obvious that if water is absorbed at all from the stomach or intestine, it must mainly enter the portal vein and pass through the liver. In the cases of the liver it is best to introduce water as hot as possible into the stomach. More water can be introduced by the tube than by swallowing under ordinary circumstances, but if lavage is impracticable, 50 cc. to 100 cc. of water at about 130 deg., F., may be drunk every few minutes, so that in the course of a few hours the patient will have taken two or three liters of water. Under either method of administering water, the complexion will usually clear, the urine will be increased both in quantity and in nitrogenous waste, and the autotoxic state will be ameliorated.

Rudolf Virchow.

According to American Medicine:

Born of somewhat humble parentage, in a small Pomeranian village, Rudolf Virchow has risen, without artifice or curried favor, to be one of the greatest, if not the greatest, personalities of our time. To his dynamic mind alone he owes the transcendent, utter unapproachable position that he holds in the world's regard. No man of our day has deserved and no man was ever the recipient of such tribute as he has just received. (See Sir Felix Semon's article in the British Medical Journal of October 19.) From all the corners of the earth his admirers hastened to Berlin to do him honor on his eightieth birthday. Not even King Edward at his coronation will be acclaimed with more sincerity and greater enthusiasm than was the unenvied King of Science before whom the greatest men of the world bowed in veneration, gratitude and love.

It has been said that Leibnitz was the last philosopher to encompass the sum total of knowledge. No one, not even the gigantic mind of Haller, has since been able to reach that great distinction; yet Virchow approaches it, and beyond question is more nearly omniscient than any man the world has seen in a hundred years.

His services to medicine are immeasurable—if we should expunge all that medicine as a science directly and indirectly owes to him, comparatively little would be left. With him begins the scientific era in the healing art, and it is he who has made us the coequals and the copartners of all strivers in the realm of science.

But Virchow's mind was not satisfied to till only a single field, boundless though it is, as he made himself an authority in ethnology, a pioneer in anthropology, a foremost archeologist and a competent egyptologist. Nor is that all. In the midst of his manifold scientific researches he found time to interest himself deeply—so different from the proverbial German professor and the busy American doctor—in his fellowmen, the struggles of his own people. He mastered the social and economic problems, and, consistent with his vigorous attitude in science, took most advanced ground in politics. As ardent scientists, we expect him to have been a dreamer in politics, an impracticable idealist, but he was not. Imbued with his duties as a citizen, he was an earnest purposive reformer, and saw as clearly the flaws and defects in the social body, as he saw them in the mortuary of the Charite. Like Gladstone, he strove for the good of the masses, but, unlike the great Commonner, he was a consistent champion from his earliest thinking days. He became the leader of a great party, composed of the best minds of the nation, and had Germany become a republic at any time within the last twenty years, Virchow might have been its first president.

As a linguist, Virchow has been a marvel to scientific men—at nearly all international congresses, no matter where they have been held, he has been able to address the great assemblages that flocked to hear him in the vernacular. Moreover, he is no mediocre classic scholar, and has a familiarity with current medical literature such as a few possess.

In Italy he instructed the Italians on their debt to Morgagni, and the English he taught to revere the name of Glisson, whose achievements they had long forgotten.

There is an inward satisfaction in the thought that we are contemporaries of this great grand old man, whose life is an exemplar and whose deeds are our inspiration. May they be spared to us many years.

The Multiplication of Books.

To the publication of books there is no end, is an old saying. From an editorial in the Journal of the American Medical Association this seems to be true:

On account of the rapid increase in the number of books the large library in Paris has been forced into new and larger quarters in order to find room for the rapidly accumulating literary treasures it is intended to house, classify and arrange in an accessible manner. The librarian is reported to have stated that it is becoming a more and more serious problem to properly house and arrange the books. If the present rate of increased production continues it will be but a short time before still larger quarters will be essential. He emphasizes particularly the difficulties of classification and practical arrangement. The overproduction is so excessive that the large libraries are threatened with perpetual and hopeless chaos in their efforts to make the vast accumulations accessible to their patrons. The transitory character and even absolute worthlessness of a large proportion of the publications are pointed out, and the remedy suggested is that writers restrict their production to the greatest possible minimum. The real literature is on the point of being buried beneath a mass of cheap trash. "One cannot see the woods for trees."

This excessive literary production is characteristic also of medicine. The number of journals, of reprints, of books, and of printed matter issued from various sources is simply overwhelming. The transitory nature of the larger part of this material is so apparent as to need no emphasis at this time. Real, honest literary study of a fairly popular topic in current medical literature is rendered exceedingly irksome and laborious, because of the vast quantity of rehash and compilation without the addition of a single original idea or suggestion. It is practically out of the question to be in touch with all the literature issued in any one department of medicine, because of the expense and time it would involve to attempt to master the stuff sufficiently well to separate the wheat from the chaff. Not only are lengthy articles produced in large numbers, but they are frequently printed in two or three different places and appear again and again under various disguises and modifications.

All sorts of medical societies attempt at great expense to issue some form of transactions or proceedings in which they too often simply reprint articles and reports that have

appeared already in current periodicals. This custom seems to be spreading also to hospitals and laboratories, which reissue in the form of reports material previously printed. Surely there is a great deal of paper and printer's ink wasted to no particular good purpose in these days, acknowledge though we must that this productiveness betokens scientific activity and interest in medicine.

Some one has characterized America as the land that flows with ink and money, and the first ingredient is certainly liberally used by the medical profession here. The same is true of the medical profession abroad, possiply to a greater extent than here in some respects. In the interest of higher standards and greater concentration and accessibility of our medical literature an appeal must be made to the self-criticism of those who write. Let not your literary activity be measured by the number of papers and addresses printed each year, or by their length, but solely by the quality. And when publishers tempt you to cover again some well-trodden field, yield not!

MISCELLANEOUS.

The Dangers and Diagnosis of Breech Presentation and its Treatment by External Version Towards the End of Pregnancy.

The dangers, both immediate and remote, of breech presentation are not generally supposed to be so great as Herbert Spencer has related in the Bristish Journal, and his article is, therefore, quite valuable and opportune.

Hegar showed that 35 per cent. of the children were born dead, and that an addition 5 per cent. died on the first day.

Ramsbotham, Hecker and Pinard give a mortality rate ranging rom 18.7 to 22 per cent. In ten thousand labors under Spencer's supervision two hundred and seventy-five presented by breech or lower limbs and one-fourth were born dead. The mortality of the male children was 30.82, the females 18.3 per cent. It is well to consider the causes of the high rate of death in children born by the lower extremities. The chief cause is the low insertion of the cord relatively to the cervix, which permits pressure while the head is passing through the pelvis. This leads to attempts at respiration by which the liquor amnii and vernix caseosa may be sucked into the lungs with fatal effects. But more important than these factors is the injury to which the child's body is subjected by reason that the small buttock takes the brunt of the labor instead of the harder and larger head. The consequence is that the abdominal and thoracic viscera are unduly pressed upon and hemorrhage and even rupture of important organs may take place, injuries so severe that they not unfrequently cause death, and leave behind life-long ill effects. All the viscera are liable to be injured by the pressure to which their delicate tissues are subjected during birth, and while cerebral hemorrhage is more frequently found in children delivered by forceps than those born by the breech, it is met with more frequently in the latter than in those born naturally by the head. The other viscera are more frequently injured in pelvic presentations.

The thoracic and abdominal organs most frequently injured are the lungs, liver, suprarenal body and testis. Lung injuries frequently cause death by pneumonia after a few days. The largest hematoma of the liver Spencer has met with occurred in a child born by the breech. The testis is an organ especially liable to injury during birth by the breech, both on account of obstruction of the spermatic veins, by the pressure in the parturient canal, and the hands of the medical attendant.

In 26 cases of breech presentation, necropsies showed in 8 cases that hemorrhage had taken place in the body of the testis, compressing and apparently disorganizing the tubules, so that it seemed impossible for the organ to have recovered its normal structure had the child survived. This suggests the important point of handling the genitals as gently and as little as possible during delivery. Spencer believes that the orchitis he has frequently observed and which may be a cause of sterility in the adult is due to this. Sometimes an hematocele is formed in the tunica vaginalis, or cord. When it occurs into the processus vaginalis while the testis is in the abdomen it may prevent the testis from descending. The uterus sometimes has hemorrhage in the mucous membrane of the body in cases of difficult breech delivery. Spencer has published two observations of the kind and they explain the occurrence of some cases of so-called menstruation in young infants. Hemorrhages into muscles are very frequent.

The most frequent sites are the muscles of the leg, buttocks, the erector spinæ, pectoralis and the superficial and deep neck muscles. Of these muscular injuries the most interesting is laceration of and hemorrhage into the sterno-cleido-mastoid muscle, which gives rise to the common so-called "sterno-mastoid" tumor. Fortunately, the injury usually disappears in the

course of a few months, though it sometimes gives rise to permanent wry-neck. Another injury, which, though not fatal, is very serious, is the co-called obstetric palsy from damage to the brachial plexus, during violent traction on the shoulders. Thirty cases have been recently published as occurring in the practice of one midwife. The bones and joints of the infant also suffer. The ligaments of the knee and hip-joint may be strained or torn by traction, and other bones may be broken. Even the pelvic bones may be fractured if the barbarous practice of applying forceps to the breech be adopted. The frequency of fractures of the clavicle is spoken of, and the liability to overlook such a condition is impressed upon the reader. These remarks are particularly valuable, as they are mostly the conclusions of autopsies which Spencer has made, and the work is unusually complete. He dwells at length upon the diagnosis and treatment of breech presentations, advising diagnosis and treatment by external version, but at 7½ to 8½ months of pregnancy. The tendency of the malpresentation to recur after being rectified can usually be prevented by an ordinary abdominal belt. Multiple pregnancy is a contraindication to version for breech presentation.—*Indian Lancet, Sept. 16, 1901.*

A Suggestion to do Away With Some of the Objections to Ether as an Anesthetic.

In our last issue we pointed out some observations, which we believe should materially assist the anesthetist in foreseeing the overdosage of a patient with chloroform, thereby increasing the safety and extending the legitimate field of this admirable narcotic agent. We take now advantage of an article by Becker, of Hildeshein, published in Centr. f. Ohir., to give a hint for assisting in making ether narcosis safer and more comfortable and altogether satisfactory.

The disagreeable effect, so often encountered and so difficult to prevent or overcome, is bronchorrhea, which often, indeed, actually puts the patient's life in jeopardy, to say nothing of the after-dangers following in its train. It is doubtful whether the lung complications sometimes ascribed to ether can alway with justice be attributed to the ether itself; certain it is that sometimes and perhaps more often than to the ether *per se* these complications must be placed to the account of the resulting bronchorrhea. While it is true, that although these troubles must at least be due to the ether, still if some way could be found to prevent the occurrence of the bronchorrhea one of the greatest objections to ether would be done away with. This abundant secretion of mucus during ether narcosis interferes mechanically with respiration, and not only this, but the aspiration of this mucus, or the irritation of certain decomposition products resulting from the action of air and light on the ether, add materially to the dangers of the either irritation itself. The suggestion of Reinhard to inject atropin subcutaneously an hour before the narcosis cannot be regarded as entirely devoid of danger. Some simpler and safer method must be sought. Some agent which will check the secretion and yet not itself add an element of danger to the narcosis was the desideratum and this Becker thinks he has found in the volatile essential oils belonging especially to the oxygen-free group the terpenes. The pure oil of turpentine and the oil of pinus pumilio or as the author calls it Latchenol, are the two oils he has found of special service.

Either of these oils may be used but Becker has found oil of pinus pumilio best adapted for inhalation because it has a more agreeable odor. He adds it to the best anesthetic ether in the proportion of I. O. G. (about 20 drops) to 200 g. (about 6½ ounces). Larger quanties may be added without harm but not with advantage. The objection has been urged against these substances that they render the ether less appropriate for anesthesia, but Becker thinks that the absence of the oxygen molecule renders them peculiarly advantageous by reason of their greed taking up of oxygen.

By this method Becker has narcotized with ether 500 times and is qutie satisfied with the results. Even in cases of existing bronchitis, pulmonary tuberculosis, empyema and emphysema in old people he has failed to see the condition made worse.

If these statements be actual facts then Latechenol and rectified oil of turpentine will merit a fair trial at the hands of all surgeons who believe ether the best anesthetic.—*The Indian Lancet* Sept. 16, 1901.

Scarlet Fever.

In the third annual report of the Hospital for Scarlet Fever and Diptheria Patients better known as the Minturn Hospital, New York, there are some interesting facts to be darawn from the tabulated statistics of the scarlet fever cases cared for at the hospital during the year 1900. (Archives of Pediatrics). The Statistics are not based upon a large number of patients, but the order in which the figures are presented and the simple manner in which the salient features of the disease are recorded when

the patients are admitted to the hospital makes a good showing for the general routine of the examination.

The statistics apply to adults as well as to children, but they are of value as showing the symptoms and complications common in early life.

One hundred and six patients with scarlet fever were in the hospital during the year. Of this number 43 were under fifteen years of age, the average being 7.06 years. There were but 2 deaths in the institution and both were children, one of six years who had complete suppression of urine. and one of three years who had a suppressive otitis media followed by pneumonia. This mortality rate is so low that even allowing for the favorable influence of hospital nursing in lessening mortality it would indicate that the prevaling type of disease was not severe.

The average period of incubation was 6.8 days. The persistence of the poison in clothing, etc., was known to be two years in one case where a child wore the clothes his brother had had on when taken ill two years before.

The most constant initial symptom was a bright redness of the throat. This was seen in every case admitted early in the disease. The throat showed other changes as follows: There was a milky exudate present in 32.3 per cent. of the cases, from which the culture always showed some variety of the streptococcus, and follicular tonsillitis was seen in26.5 per cent.

There was vomiting in 60. 4 per cent. of the cases and a chill was noted in 30.2 per cent. The papillæ of the tongue were enlarged in 23 5 per cent. of the cases, but a strawberry tongue was seldom observed.

The rash was usully typical but there were exceptions to the usual exanthema. The eruption was hemmorrhagic in 4.9 per cent. No blush at all could be found in 6 per cent. of the cases, but a well-defined miliaria was present in all of these with marked constitutional symptoms followed by profuse desquamation.

Desquamation was as constant a symptom as the redness of the throat. It was observed that desquamation usually began on the edge of the ears before the eruption had faded, but in some cases the desquamation was noted until the skin of the palms of the hands and soles of the feet began to seperate. The process required on the average forty-seven days for its completion and all efforts made to hasten desquamation failed to lessen the period.

The kidney complications were few and to judge from the report the only patient who was seriously ill with nephritis was the child of six years who died with acute suppression of urine.

Albuminuria was present in 31 per cent. of all cases, both children and adults, but in only 14.5 per cent. did it last more than two days. In no case was it present when the patient was discharged from the hospital.

This most satisfactory result was no doubt attributable to the fact that the patients were kept in bed and on a milk diet, the average time in bed being about twenty-five days for each case. The charts for the patients had noted on them the total amount of milk and water actually consumed and the amount of urine passed.

Cervical adenitis was recorded in every case of scarlet fever in which there was exudative inflammation in the nasopharynx, but suppuration never occurred. There was a rapid subsidence of the swelling of the lymph nodes when the nasopharynx was irrigated and hot poultices were applied to the neck.

Indicanuria was detected in 80.6 per cent. of all cases. The indican was regarded as an indication of intestinal fermentation.

The common complications of serious otitis media and of purulent otitis media were observed in 16 per cent. and in 4.7 per cent, respectively of all cases.

Bronchitis, pneumonia, endocarditis, rheumatism and chorea were also observed as complications.

The report emphasizes the great advantage of absolute rest in bed for all patients ill with scarlet fever and the decided influence of such rest is lessening the rapid pulse. The maintenance of kidney activity is assured and the chances of nephritis diminished when a liberal milk diet is insisted upon from the beginning of the illness until all risk of kidney congestion is past.

The physicians who see scarlet fever cases in private practice will question the statement that the period of desquamation cannot be shortened by any method known at this time, for almost all practitioners who insist upon inunctions, bathing resorcin soap and salicylic acid ointment feel that they are in some degree lessenlng this tedious period.

Hospital statistics are too often thrown aside because they are not contributions to the study of disease, but we have in the brief report just quoted some details that are both suggestive and helpful.

A sensation of soreness in the bones of the feet is said to be a reliable indication for salicin.

Iodophilia.

The diagnosis of pneumonia at an early stage and of so-called central pneumonia at any stage is often a matter of no little difficulty, and it would naturally be a great gain to possess a ready and reliable means of recognition when the usual physical signs and symptoms are wanting. Such an expedient, it would appear, is to be found in the demonstration in the blood of leucocytes that exhibit a peculiar reaction to iodine and for which reason the name iodophilia has been given to it by Dr. Theodore Dunham (Boston Medical and Surgical Journal). The reaction, it is true, is not exclusive to pneumonia, occurring also in the presence of suppuration and of some other disorders, which, however, are readily recognizable by other means. Nevertheless, it may prove to be a useful aid in diagnosis. The reaction is developed by exposing a spontaneously dried blood-smeare to the action of a solution containing three parts of potassium iodide and one part of iodine in one hundred parts of water, brought up to a syrupy consistency by the addition of lumps of gum arabic. Normally the lymphocytes and the eosinophile cells are not affected by the stain, while the polymorphonuclear neutrophiles either are unaffected or their protoplasm is tinged a faint pinkish or brownish color. Under some pathological conditions, however, the protoplasm of a certain proportion of the polymorphonuclear neutrophiles takes on reddish-brown color, which in some is diffuse, in others forming a granular network, in still others appearing in large or small refractive granules varying from a light pink to a dark red. The condition seems to occur always in the presence of progressive suppuration and of progressive pneumonia and also of a few other morbid conditions. The intensity of the reaction seems to be closely related to the intensity of the suppurative process. The special value of the reaction in cases of pneumonia resides in the fact that it occurs before physical or other specially suggestive signs make their appearance. Iodophilia has been observed also in cases of various forms of blood-change, but these are not likely to be confounded with pneumonia.—*Medical Record.*

Atropine Treatment of Intestinal Obstruction.

Simon (Munch. med. Woch.) details a case in which he used atropine to overcome intestinal obstruction. The patient was delivered of her seventh child by a midwife, and 8 hours later was noticed to be progressing unfavorably. She showed signs of septic infection, which was at first accompanied by diarrhœa. Later vomiting occurred, and neither flatus nor fæces were passed *per anum.* On the tenth day everything was vomited. He injected 1-60 gr. of atropine at 11 p. m. This was followed by a quiet night, and only 2 attacks of vomiting. On the eleventh the abdomen was much distended, no wind or fæces had passed. Atropine, 1-60 grain, was injected three times. Enemata per rectum returned quite clear. Mydriasis and dryness of the throat were noted. On the twelfth day the stomach was washed out and fæcal material was removed. A further attempt to induce an action of the bowels by means of enemata was unsuccessful. Atropine, 1-30 gr., was injected twice. The patient at first became quieter and easier, and later on became delirious and partly comatose. Early on the thirteeth day flatus and some fæcal material was passed, and this again took place during the course of the day. The vomiting ceased, and on the fourteenth day a large evacuation took place. The temperature remained subnormal during the whole period, but rose after the relief of the symptoms. Eventually the patient made a complete recovery. W. Hochtlen also reports a case. His patient was a female aged 71. The symptoms of obstruction declared themselves four or five days after the last motion of the bowels. He used ol. ricini and enemata of water at first, and later glycerine injection. On the third day of illness he injected atrop. sulph. gr. 1-20 and repeated this on the fourth day. Serious toxic symptoms (delirium, great restlessness, etc.) occurred, but the condition remained unaltered. On the fifth day he had recourse to morphine, and this he repeated on the sixth day. He washed the stomach out, and again tried enemata. All thoughts of operation were put aside on account of the patient's general weakness, age, etc. She died on the sixth day. Post-mortem he found that intestinal obstruction was caused by the junction of the descending and transverse colon being completely bound down by inflammatory bands. The explanation was therefore apparent why medical and mechanical treatment had failed.—*British Medical Journal.*

In nocturnal incontinence of urine, atropine, in doses of 1-500 grain, three times a day, cured twenty-nine out of thirty-seven cases.

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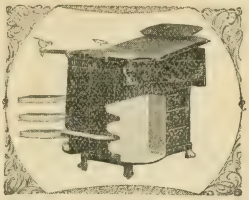
Prof. Rudolf Virchow.

Prof. Rudolf Virchow, whose eightieth birday was recently widely celebrated, was born October 13, 1821, at Schievelbein, a small town in Pomerania. He was educated at the Gymnasium, in Berlin, and, in 1839, he began his medical studies. He graduated at the University of Berlin in 1843. The following year he was appointed assistant in pathological anatomy at that institution. In 1846 he was connected with the Charite Hospital, and a year later was appointed regular lecturer in the university. In 1848 he was commissioned by the German government to visit Upper Silesia to study typhus fever there. In 1849 he became professor of pathological anatomy at Wurzburg, which position he held until 1856, when he was called to be director of Pathological Institute, in Berlin. He was a member of the Prussian Chamber in 1862, and of the Reichstag from 1880 to 1893.

The name of Professor Virchow is inseparably associated with cellular pathology which he first expounded. He is also well known as a student of archæology, ethmology, and anthropology. The gold medal for Science, conferred by Emperor William upon Professor Virchow in connection with the celebration of his eightieth birthday, is possessed by no other member of the medical and law faculties of the University of Berlin, and by only three members of the philosophical faculty, including Dr. Mommsen, the historian.—*N. Y. Medical Journal.*



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Red Blood Corpuscles as Bactericides.

Reim (Munchen. med. Woch.) publishes some observations, which throw doubt upon the generally received view that the leucocytes alone among the blood corpulcles have bactericidal properties, and maintains that the red cells should not be rigidly excluded. Typhoid bacilli in pure bouillon cultures were added to fresh defibrinated blood, and the mixture allowed to stand at body temperature. The blood cells first become pale and biscuit-shaped, or take the thorn-apple form; later on they disappear entirely. The bacteria lose the power of motility and become aggregated in clumps, which are not so typical as in true agglutination, and ultimately, in about four days, become swollen and granular. This destruction of bacalli differs from the ordinary bactericidal action of the serum in the time of its occurrence. In the latter case the action is rapid, appearing during the first twenty-four hours, whereas in the former case it is slower, the breaking down of the red cells first acting as a favorable nutritive medium for the bactericidal growth, while later the invading bacteria become subjected to degenerative processes.—*Indian Med. Record.*

When the stroke of the pulse is feeble, and the sounds of the heart are faint, give digitalis.

Greatest in the World, Prof. Tchweitzer profoundly Impressed With Parke, Davis & Co.s' Plan Celebrated Expert Pays a Visit to Detroit.

Prof. H. Schwetizer, one of the foremast chemists in the country, secretary of the American branch of the Society of Chemical Industry of London, England, ex-professor of chemistry in the great Heidleberg Univerity, and a member of the committee on adulterations of the national Wholesale Druggists' Association, is at the Russell House.

Prof. Schweitzer come to Detroit for the purpose of giving expert testimony in the case against Detroit men charged with couuterfeiting trade-marks owned by Farbenfabriken, Bayer & Co., of Elberfeld, Germany. The professor is well known to the courts in the east, as he is almost invariably called as an expert in cases where the questions involved are similar to those that will come before the court in the Detroit cas.

Herr Schweitizer is but 41 years old, yet he has reached the very pinnacle of success in his chosen profession. In appearance he is the typical dashing student of the German universities, ever ready to quaff a glass of Rhine wine or bock beer, and just as ready to fight a duel in the moonlight.

The professor has traveled all over the world perfecting himself in his profession, but not until he came to Detroit did he realize the greatness of the Parke, Davis & Co., plant. He said he had heard of it in all quarters of the globe, and yet he did not expect to see such an interprise in what he called the "middle west of a half-populated country."

Prof. Snhweitzer visited the plant yesterday afternoon, and this is what he says he found:

"The greatest industry of the kind in the world, the greatest beyond all question. The biological department was astounding. The physical assay work on animals is worth to a student a walk of 1,000 miles. The scientific atmosphere is an inspiration and the ingenious machinery a marvel. I was told that there were employed in the factory alone over 1,500 people, and that the firm has 207 traveling men employed.

"There are five American branches, I was told, and there are manufacturing plants in England and Canada. In the English plant are employed 250 persons. There is nothing wanting in this plant for the production of powerful, accurate, uniform and palatable medication. They have a circulating library for the employes, as well as an emergency hospital, and I understand the employes have decent hours and are well treated."

The professor was asked why such plants are not established in the old world. He said:

"The reason is that in the countries of Europe every druggist is a manufacturer. He compounds his own medicines in the back room of his store. He has his own laboratory, and there he experiments. Here it is different. If the druggists of the old world could have walked through the plant that I walked through to-day, they would realize that they could never hope to learn in a lifetime what is learned in that institution every hour."

Prof. Schweitzer will remain in Detroit until the cases before the courts are disposed of. In the meantime he will visit the University of Michigan. This is his first visit to this city, and he expresses himself as being charmed with the city and with its people.

Attorney Allan H. Frazer, who is a friend of the professor, will see to it that he comes in contact with the bright side of Detroit life.—*From the Detroit Journal, Tuesday, October 22, 1901.*

Pleuropneumonia.

The man now under consideration is a sailor, forty years of age. He has had winter cough for some years. This has increased lately, and he has had chills, fever, etc. The condition found upon physical examination does not fit pleurisy with effusion or pneumonina, but resembles each. Hence we make the diagnosis of both or pleuropneumonia. There are signs of a great deal of effusion, and the question of operating comes up here. I have decided to not operate at the preaent. The patient is improving rather than becoming worse, and the effusion is probably a serous one at the present time. In my judgment, the patient in such a condition is better if the effusion is left alone.

As to the treatment, the first thing to be done is to keep the man strictly at rest in bed. Secondly, liquid food should be given in order that he may have rest in every respect even as regards digestion. Consequently his diet consists of one pint of beef tea and three pints of milk every twenty-four hours.

As to drugs, five grains of the carbonate of ammonium and one-half grain of opium are given every four hours. One-half ounce of whisky has been given at the same interval, but this will not be continued long, as I do not see the necessity for its use in many of these cases. Cupping over the affected lung was applied once.

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A prominent physician recently remarked that when he commenced to practice he told his patients to have their prescriptions filled wherever it was most convenient.

He soon found however that this was a serious mistake on his part, for in many instances the expected results failed to materialize, the patients derived no improvement and left him in disgust for another doctor.

After he had had a number of such experiences he felt called upon to investigate and made the irritating discovery that these prescriptions had failed to do the work on account of having been improperly filled, the druggist either using a substitute for some preparation specified or cheap and inert ingredients instead of fresh and reliable drugs.

Such is no doubt the experience of every practitioner, especially those in large cities where the patients may live several miles from his office and are in the habit of patronizing some druggist near their residence.

Physicians must understand that their responsibility does not cease when the prescription is written but that it is their duty not only to give minute instructions as to where it is to be filled but also to examine if possible what the druggist has given the patient.

It is not to be supposed that even the majority of retail druggists are substitutors but it is a well established fact that this nefarious practice widely exists and the unfortunate feature of the situation is that some men, who are highly regarded commercially and socially, are willing to sacrifice business principles and all sense of honor, to say nothing of tampering with human life for such a pittance as the difference between the cost of the genuine preparation and a counterfeit, or of pure, fresh drugs and cheap, old inert ones.

The physicians chief safeguard is in prescribing original packages as far as possible since the risk of detection in such cases is much greater and that act is in direct violation of the laws of many states which make it a crminal offence.

The General Assembly of the State of Tennessee recently passed an act to prevent the substitution of any drug in filling physicians prescriptions by druggists in that state, making it a misdemeanor and upon conviction the druggist shall be fined not less than $25 nor more than $100 for each and every offense.

Such a law is of great assistance in stopping substitution but of course it is not always possible to secure the necessary evidence for conviction and there is more or less uncertainty in appealing to the law. So that after all the physicians greatest protection relies upon the personal attention which he gives to this most important matter.

Sanmetto in Hypertrophied Prostate in Irritability of Bladder.

I put sanmetto to a very thorough trial thinking as I prescribed it, "now I will see." I have a case in an old gentleman suffering from hypertrophied prostrate, of long standing had been giving "elix. saw palmetto comp." etc., substitutes of sanmetto I take, it but with little benefit; had advised castration as the only method of relief. But to my pleasure, and I may say surprise, I noticed some little benefit following the administration of a bottle of sanmetto; bought another bottle, 8℥. gave that, and am giving it now, with *decided* benefit. I gave another bottle of it to a patient who had been taking huge doses of kissengen and vichy salts for obesity, on advice of another physician, until he had produced an irritation of his bladder, almost beyond endurance. Two days treatment with sanmetto relieved him nicely, and a tablespoonful per day now control it. I shall in future use only the "real thing," no more substitutes of sanmetto for me.

Edgar I. Bradley, M. D.
Elkhorn. Mont.

Apropos of the disappearance of Leprosy and other skin diseases, we read in Gilbert White's Natural History of Selbourne, in letter 37, written January 8th, 1778, as follows:

"This happy change perhaps may have been orriginated and been continued from the smaller quantity of salted meat and fish now eaten in the kingdoms: *From the use of linen next to the skin*; from the plenty of better bread; and from the profusion of fruits, roots, legumes and greens, so common in every frmily. The use of linen changes, shirts or shifts, in the room of sordid and filthy woolen, long worn next the skin, is a matter of neatness comparatively modern; but it must prove a great means of preventing cutaneous ails. At this very time, woolen, instead of linen, prevails among the poorer Whelsh, who are subject to foul eruptions."

("From a letter of John F. Fitzpatrick, Esq., St. Paul, Minn., of Sept. 20th, 1901, addressed to the Deimel Linen Mesh System Company. See also their advertisement in this month's issue.)

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About a year ago, within the short period of three weeks, four eminent and distinguished physicians departed this life. Two of these well known men (Hunter McGuire and Lewis A. Sayre) were surgeons and two (Jacob M. DaCosta and Alfred L. Stillé) physicians, and three of them were ex-Presidnnts of the American Medical Association. Believing that the rank and file of the profession would appreciate and preserve portraits of the representative practitioners and teachers, the Arlington Chemical Company commissioned a competent artist to paint them in oil in the shape of a panel suitable for framing, and have reproduced the painting for distrobution to their friends in the profession. This handsome and thoroughly worthy group of portraits is now being mailed and if any physician is, perchance, omitted from the list, a request will bring a copy.

The inebriate in this country seldom has a long preliminary period of beer or moderate wine drinking. Usually he begins by using spirits to intoxication. Then, if the effects have been pleasant and no serious results have followed, he continues to use spirits at intervals in moderation. From any unusual causes he drinks to intoxication again. But the first poisoning from spirits has left a painful impression on his mind. He abstains for a long time, or perhaps never drinks again. It is said that the American inebriate is self-assertive and more precipitately and is less curable, unless he is determined to recover—*Quarterly Journal of Inebriety.*

Nervous Diarrhœa.

Pariser distinguishes five forms of nervous diarrhœa, due to (1) central nervous influences; (2) toxic causes, as from tæniæ, nicotine, morphia; (3) reflexes from the pelvic organs, stomach, nose, or skin; (4) neurasthenia; (5) combined catarrh and neurosis. The differential diagnosis is easy when the symptoms point to neurasthenia, while one of the most valuable signs is persistence of the diarrhœa after adoption of a simple non-irritating dietary. The great abdominal nervous plexuses are often hysperæsthetic; mucus is absent from the stools, save sometimes in the fifth group; other objective signs are lacking. The treatment resolves itself into finding first the cause, then removing.—*Edinburgh Medical Journal.*

The following is recommended in Medical Council, as the only right way of giving a hypodermic injection: Pick up the entire fleshy mass between the skin and the bone in the less tender part of the upper limb, the back, upper arm or shoulder, and push the needle directly through the right angles to the skin. It should be done with a quick stab, and made to enter the muscle mass. The fluid is then gradually pushed home, after which the needle is withdrawn quicker than it went in, the puncture site being massaged for a moment for the double purpose of obliterating the needle track and promoting absorption of the injected liquor. "The patient does not mind it. We have never had an abscess in twenty years' work."

Syphilitic Sciatica and its Treatment.

F. Mendal describes three cases in which the sciatica, while giving the symptoms of the ordinary type, was evidently, as shown by the history, other lesions, and the result of treatment, luetic in nature. All three patients had resisted all therapy, and in consequence of the pain and insomnia were grealy reduced in flesh and strength. The results of mercurial treatment were almost miraculous, mercury salicylate was given hypodermatically in the gluteal region, and the first injection gave great relief in each case, while five or six repetitions completed the cure.—*Indian Medical Record.*

A Little Bit of Modern Polypharmacy.

The Journal de medecine de Paris for September 1st cites the following birdshot prescription (called Pastilles of Cachunde) for the treatment of anaphrodisia, from the Echo medical du Lyon: ℞ Armenian bole, 50 grammes; amber, 25 grammes; musk and ambergris, of each 3 grammes; aloeswood, 16 grammes; magnesium carbonate, 23 grammes; yellow sandal wood, 5 grammes; red sandal wood, 100 grammes, mastich, sweet flag, galangal, cannella, aloes, rhubarb, myrobolans, absinthe, of each 3 grammes; calcined ivory, 90 grammes; Muscat wine, 50 grammes; distilled rose water, 25 grammes; sugar, 2,500 grammes; mucillage of gum tragacanth, q. s. To be made up in pastilles of 9 grains each. From six to eight daily.—*N. Y. Medical Journal.*

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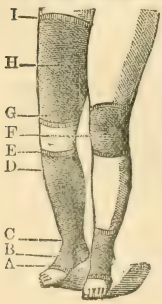

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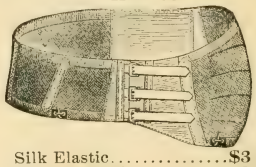

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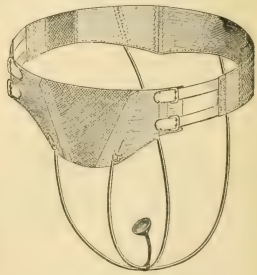

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a safe, trustworthy, non-tonic antiseptic, answering every requirement of the physician and surgeon. In special practice, notably Laryngology and Rhinology, Listerine occupies an unrivaled position by reason of its excellence and wide range of utility.

An interest little brochure, entitled;

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Will be mailed to your address upon application.

Its exceedingly agreeable properties, and the readiness with which it disinfects offensive lochial discharges, has won for LISTERINE a first place in the lying-in room as a general cleansing, prophylactic or antiseptic agent. Whilst there is no possibility of poisonous effect through the absorption of LISTERINE, its power to neutralize the products of putrefactive changes, and thus to prevent septic absorption, has been most satisfactorily determined by extended clinical test.

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promptly destroys all odors emanating from diseased gums and teeth. It is a perfect tooth and mouth wash, indispensable for the dental toilet.

Lambert's Lithiated Hydrangea

A remedy of acknowledged value in the treatment of all diseases of the urinary system and of especial utility in the train of evil effects arising from a uric acid diathesis. Close clinical observation has caused LAMBERT'S LITHIATED HYDRANGEA to be regarded by physicians generally as a very valuable Kidney Alterative and antilithic agent in the treatment of

Cystitis, Diabetis, Gout, Rheumatism, Hematuria, Bright's Disease, Urinary Calculus, Albuminuria and vesical irritations generally.

Realizing that in many of the diseases in which LAMBERT'S LITHIATED HYDRANGEA has been found to possess great therapeutic value, it is of the highest importance that suitable diet be employed, we have had prepared for the convenience of physicians,

DIETETIC NOTES.

suggesting the articles of food to be allowed or prohibited in several of these diseases. A book of these Dietetic Notes, each note perforated and convenient for the physician to detach and distribute to patients, together with a pamphlet treating of "**Renal Derangements**" may be had by addressing:

LAMBERT PHARMACAL CO., ST. LOUIS.

A Clinical Report on Gude's Pepto-Mangan.

There may still be some doubt whether manganese is a normal constant constituent of the human blood or of any of the tissues of the body. It may not have been positively determined whether iron, when given in an inorganic compound or in pure metallic form, is absorbed by the mucous membrane of the stomach or intestinal canal, or whether it accomplishes its curative work by some occult process of stimulation of that membrane, by virtue of which it takes up with greater readiness the nutritive portions of food substances which are presented to it at the same time; or whether it plays a chemical role in changing the contents of the alimentary canal, so that what eventually passes into the circulation is more fitted to maintain high standards of nutrition or will prove less deleterious to the processes of life.

Even when we have combinations which, whether obtained synthetically or analytically, resemble the forms in which this metal is found in the blood, our assurance is by no means perfect that they can pass the portals of the circulation, the absorbent organs of the alimentary tract, without great risk of change from their original forms, in their contact with the substances and tissues to which they are exposed.

All these are still questions, on some of which the evidence is sufficiently positive to leave but little doubt, while on others there are so many theories that we are left to choose what may best suit the results of our own observations, if not, indeed, our caprice or fancy.

To the chemist and therapeutist these are certainly interesting and practical questions. Before the physiologist and pathologist still others of equal importance loom up. What are the different steps in the process by which an atom of iron, in either a food or drug, becomes ultimately an ingredient of the hæmoglobin of a corpuscle, and what have been the dynamic processes with which it has associated itself up to this point? Again, what is its final destination and disposal? With what materials has it been combined, and what forces has it generated and modified by the time it has finished its course? What accounts for its disappearance under certain abnormal conditions, and why does the train of symptoms which we witness arise under these circumstances?

Again, these are facts, theories, hypotheses and speculations which we are bound to consider, and, in the light of our own reason and judgment, to determine.

But while we are thankful for all the light that can be shed on these problems, and, as members of a cultured profession, are impelled to continue their investigation, yet to the clinician their solution is not essential. Whether his path be flooded with the brightness of midday or shrouded in Egyptian darkness, he must still walk on in it. When, in the records of professional literature or in the acquirements of his own personal experience, certain means have associated themselves with consequent legitimate ends, it is his plain duty to adapt the one or the other. And, again, where the means have been to a degree inadequate, on the introduction of what appeals to his reason as of a higher probable power, he must determine the claim. The clinician must not allow himself to be diverted too far into the by-paths of knowledge, less he become timorous and undecided. The locomotive engineer, who knows the management of his engine in such a way as to start it, regulate its speed and stop it, so that he will constantly carry his train to its destination on time and without accident, and with the accomplishment of all that is expected of him at the termini and at the way-stations, is but little the better for a complete knowledge of the country through which he travels; of the industries of the towns at which he stops; of the mechanical and physical forces which rule the movements of his engine; or the mathematical rules which govern the construction of the road.

My observation with Pepto-Mangan, introduced to the profession by Dr. Gude, chemist, of Leipzig, are such as can be easily confirmed by any physician, since they were all made in private practice, and rest on bedside and office notes. I have used the preparation to a considerable extent ever since it was first brought to my notice, which I think was about two years ago. Owing to some special good results obtained, I was led to the series of recorded observations on which this paper is based. They extend over four months of time, and embrace about fifty cases.

As a rule, I followed the directions issued by the manufacturers in its administration, giving to an adult a tablespoonful dose and to younger subjects a proportionate amount. Milk seemed to be the best vehicle, and immediately before or after meals a convenient time. In its relation to food, however, I do not think we need exercise any special care as to its administration. There are but few cases in which I found any disturbance of the digestive functions by these doses, but in several there was considerable constipation induced, and in one or two some diarrhœa, as the apparent result of the drug.

FLUOROFORMOL

(Aqua fluoroformii), tasteless, not toxic nor irritant. Dose, tablespoonful four times daily. In phthisis, tubercular infiltrations, local tubercular lesions of the glands, joints or skin (lupus). Sample (1 lb.) sent to physicians on receipt of one dollar.

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TRIFERRIN

FERRATOGEN

Organic iron made from yeast grown in a ferruginous medium; readily assimilated without gastric disturbance.

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Superior to the older bismuth salts in all gastro-enteric disturbances. tubercular diarrhea. Soluble in water. Dose, 3-7 ½ grains.

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Difluordiphenyl ointment 5 per cent. Unequalled in whooping cough. Lessens number and severity of the paroxysms. cuts short the attack. Sample (20 grams) sent to physicians on receipt of twenty-five cents.

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Diuretic in all forms of dropsy. Prolonged favorable results. Also in angina pectoris, cardiac asthma. Dose, 10 15 drops.

AMINOFORM

Uric acid solvent, genito-urinary germicide. Dose, 5-10 grains.

DIATHESIN

Supersedes salicin and salicylates. Palatable and well borne.

VIOFORM

(iodochloroxychinolin). Antiseptic powder, six times as bulky as iodoform; odorless.

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Fluorphenetol ointment for rheumatiem, lumbago and sciatica. Samples as with Antitussin.

MENTHOXOL

CAMPHOROXOL

Antiseptic solutions superior in power and permanency to simply hydrogen peroxide. Sample (½ lb. of either) sent to physicians on receipt of twenty-five cents.

TORIL CHINOLIN NAPHTOL GAUZE DIFLUORDIPHENYL

C. BISCHOFF & CO.,

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While my experiments in this direction have not gone far enough to beget firm convictions, I am of the opinion that in the main equally good results could be achieved by a smaller average dose, and in this way the small number of untoward results might probably be still further diminished.

In one series of twenty-three cases the patients were all married women, ranging from the ages of twenty-two to seventy, who were more or less anæmic from various causes. In all but five the results were decidedly satisfactory, and of these one failed to report the second time, so that the result is not known. The other four cases of advanced organic disease, in which no therapeutic procedure could have given decided results. In nine of the twenty-three case the results might be classed as brilliant. In all of the others I am convinced that no other preparation of iron could have done more. The condensed details of a few illustrative cases from this series follow.

A woman of 65, during several years had occasionally applied for relief from vertigo, frequent attacks of palpitation and general weakness and nervousness. She also had frequent long-continued attacks of diarrhœa and some gouty manifestations in the joints. In November I found her very decidedly prostrated and anæmic. She took the Pepto-Mangan in connection with a carefully regulated diet (chiefly albuminous) for six weeks, and gained steadily in strength and weight. At the end of that time her symptoms had disappeared, and she claimed to be in better condition than at any time during the previous two years.

A woman of 25, of highly nervous temperament, cultured and refined, had passed through her first confinement in May, the labor being a very difficult one, and resulting in a still-birth. She grieved very much, and, though fighting bravely against her depression of spirits, by autumn she became very neurasthenic and anæmic. She had morbid fears, frequent flushes, and some menorrhagia. She was put to bed and given Pepto-Mangan and strychnia sulphat in gr. 1-30 doses x. i. d., and recovered rapidly. She again became pregnant, and is perfectly well.

A mother of three children, aged 32, the youngest ten years of age, who has during the last year had some three or four attacks of memorrhagia, had gradually reached a quite profound state of anæmia in spite of plentiful administration of other forms of iron in the intervals of the menses. She is obstinately persistent in refusing a uterine

examination, and was therefore treated symptomatically only. My recent prescription of Pepto-Mangan has rapidly dissipated her pallor and improved her general health.

A primipara, aged 22, was pale during pregnancy, and at the end of her lying-in, though she had not lost blood at all profusely and claimed to feel well, was very pallid. After using the Pepto-Mangan for two weeks her color had been fully restored.

Two young married women, both of whom had passed through a confinement within a year, were anæmic, and frequent sufferers from headaches, and considerably debilitated. They both recovered promptly on the Pepto-Mangan.

Another series of nine cases consists of children from infancy to the age of 12. In all marked results were obtained.

A little girl of 4, for two successive summers had frequent malarial attacks of an irregular character and resulting in anæmia and debility. She had been treated with arsenic, quinine, various preparations of iron, and, though responding to the drugs, was still inclined to fall always a ready victim to fresh onsets of the disease. On Pepto-Mangan she made steady and rapid progress toward robust health, and now is a perfect specimen of a vigorous child.

An infant of seven months passed through a siege of infantile remittent with a great deal of bowel disturbance, which yielded to quinine in the course of two weeks. Within a month the same train of symptoms developed, and quinine was again given, and followed by Peto-Mangan, and since then the child's health has remained good, although several month have elapsed.

A girl of 7, who had for a long time been pale, took diphtheria. After recovery from the disease, the anæmia, as might be expected, was still more grave. She was put on Pepto-Mangan and soon became rosy and strong.

Another girl of the same age, also habitually pallied, had wryneck for two weeks, which disappeared under iodide of potassium, but the anæmia had increased. Her restoration in color and to robust health was secured by the use of Pepto-Mangan for a month.

A little boy of 4 had measles, from which he made a good recovery. Two months later he was very anæmic and listless, with poor appetite and slight feverishness. He at once improved on the Pepto-Mangan, and continued until fully restored.

A baby, 6 months old, one of a pair of twins, had developed a quite marked degree of hydrocephalus. Large thin blue veins stood in relief all over the scalp. The anæmia was very pronounced. She was put on Pepto-Mangan, and her appearance now is much better, with strong indications of the arrest of progress in the disease.

Another series of five cases includes girls approaching, or slightly beyond, puberty, all anæmic, and all responding to the use of Pepto-Mangan.

Of this class, a girl of 17, who has always been pale, thin and puny, has only come under treatment within a month. She has never menstruated, and shows but little tendency to don the usual physical habiliments of the maiden. She is under size, but has since her early girlhood always had an aged look. Her appetite is very meagre and somewhat capricious. She suffers from pains in the legs, more especially the joints and has a distinct systolic murmur. Under the Pepto-Mangan she seems disposed to gain in color and appetite, and the pains in the legs have somewhat diminished. I shall watch the outcome of this case with great interest.

In submitting this report, I wish to summarize these conclusions:

That Pepto-Mangan is a highly available preparation of iron, on account of its liquid form, pleasant taste, non corrosive action on the teeth and unirritating effect on the digestive organs, admitting thus of easy gradation of dose, easy administration to children and avoidance of unpleasant effects in all classes of patients.

That it is an efficient and rapid restorer of the normal quality and quantity of the blood in all conditions where the state of the organism admits of this result by the administration of the chalybeate.

Sanmetto in Frequent Micturition and Nephritis Following La Grippe.

I used Sanmetto in a case of a man seventy-eight years of age, recovering from La Grippe, troubled with frequent mictrition and chronic nephritis. The result of the agent was completely satisfactory. Have used it since in cases of irritable bladder, with pleasing results.

A. Blodgett, M.D.

Benecia, Cal.

Says Dr. J. C. Culbertson: Vll that is known of the entire materia medica,as well as ather resources in the art and science of medicine, is as wide open to the commasd of one physician as of another, and the difference between them is fouhded upon but two accomplishments: Abslity to diagnose patnological conditions and a systematic use of of personal influence in the treatment of disease. All other therapeutic aids are merely valuable acjuncts.

IN DIABETES TRY PROTONUCLEIN SPECIAL TABLETS.

TROPHONINE,

a palatable and nutritious liquid food, contains the nutritive elements of beef, nucleoalbumen, and wheat gluten, so prepared as to be readily absorded and aid almost immediately in the process of reconstruction. It furnishes the sick with the largest possible supply of nourishment and with the minimum tax on the digestive organs.

IN DIPHTHERIA TRY PROTONUCLEIN SPECIAL POWDER.

IN SMALL POX TRY PROTONUCLEIN SPECIAL POWDER AND TABLETS.

PROTONUCLEIN

acts by increasing the number of leucocytes, destroys toxic germs, increases the inherent resistance to disease, quickens glandular activity, arouses the nutritive forces, gives tone to the system, and stimulates cell-life throughout the organism.

IN MALARIA TRY PROTONUCLEIN SPECIAL TABLETS.

IN ALL WASTING DISEASES TRY PROTONUCLEIN SPECIAL TABLETS

PEPTENZYME

is the only perfect digestive. It digests every variety of food. In physiological activity it presents the active and mother ferments of the entire group of digestive organs. It aids digestion by furnishing an additional supply of protoplasmic material out of which active ferments are elaborated, and perfects the process by increasing cellular activity.

The Use of Protonuclein Special Powder should be preceded by Spraying the Diseased Surface with Zymocide.

Samples and Literature on request,

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The Treatment of the Prostatic Hypertrophy.

Dr. M. Krotoszyner, of San Francisco, contributes in the American Journal of Dermatolygy and Genito-Uurinary Diseases (July No.) an interesting paper upon the treatment of prostatic hypertrophy, of which we extract the following:

"The medicinal treatment of prostatic hypertrophy aim to reduce the enlarged gland by injection of certain drugs into the parenchyma of the gland or by their application upon the gland, per rectum (in form of suppositories or small clysmas), or by their internal administration. I have experimented with several drugs recommended to possess reducing properties (iodine, ichthyol, &c.), but have failed to see any perceptible influence upon the size of the gland or upon the complicating symptoms of prostatic hypertrophy. I have seen temporary relief of the distressing symptoms by the use of some of our California springs (namely, Barlett) through the beneficial influence of their waters upon the constipation and cystitis of prostatics; the gland, though, remained uninfluenced as a rule, and soon after their return home the patients presented the same intensity of protatism.

"The organo-therapy in prostatic hypertrophy has in the experience of careful observers not shown any effect. Reinert, Englisch, and others have reported some satisfactory results with the administration of fresh substance of ox-prostatics by maintaining such treatment during a period of about two months. But the results of the majority of others are discouraging, and the method is at present abandoned.

"The introduction of Urotropine, in the treatment of the complicating cystitis and infection of the upper urinary passages is to be considered a progress and aid to in expectant therapy. It is, though, the experience of observers, as well as that of the writer, that with the discontinuance of the drug the painful symptoms of cystitis will recur.

"Urotropine, taken internally, while methodic dilatation of the prostatic urethra is made, has proved of such benefit in many cases that operative procedures did not need to be considered.

Euphthalmine as a Mydriatic.

Dr. A. Darier, Professor of the Faculte de Medicine de Paris, writes in the Revue de cours de Medeceine on ocular therapeutics. After speaking of the various media in use for the tonicity of the cilliary muscle and the iris, and passing in review atropia, scopolamine, homatropine, duboisine, ephedrine, and mydrine. he says: "We have tried and studied all these mydriatics, but the one which seems to us to combine most of the conditions which we claim for a mydriatic—quickness in action and without notable injury to accommodation—is Euphthalmine, which we use in solutions of 5 in 100. One or two drops are sufficient to bring about, within thirty-five minutes, a maximal pupillary dilatation which will permit of ophthalmoscopic examination without notable change of the vision. A slight dimness of the sight is coused by the diffusion of the rays of light penetrating the dilated pupillary orifice. The patients can read the ordinary characters of a journal or a book without great difficulty, and the action of the materia ceases completely after two or three hours.

"Since using Euphthalmine for ophthalmoscopic examination we never found the unpleasantness so frequently occurring with other mydriatics. Patients never complained of its action apart from slight dimness of sight, and in the evening the Euphthalminized eye always became normal. This medium is of great service in all doubtful cases of iritis. In iritis, the use of atropine presents no inconvenience, but if, on the contrary, one has to deal with a simple case of perikeratic hypæremia or a mild case of espiscleritis, the patient is subjected to paralysis of the accommodation for eight to ten days, while with Eughthalmine the pupil is dilated rapidly, regularly, and completely, and it is possible to make a diagnosis equally well without any of the inconveniences produced by atropine.

"The name of Euphthalmine applies to a synthetic product which is chemically constituted under the name of oxy-toluylen-metyl-vinyl-diaceton-alkamine.

"We summarize the advautages of Euphthalmine as follows:

"(1) The dilatation of the pupil takes place as quickly as with any other mydriatic.

"(2) The influence on the accommodation is not worth mentioning.

"(3) The intraocular tension is not altered.

"(4) No toxic symptoms have up to the present been observed.

"(5) No corneal nor conjunctival irritation has been noticed.

"(6) The mydriasis quickly disappear."

For diarrhea of children, accompanied with slight inflammation, straining, and the passage of jelly-looking matter, but no true eysentery, fiive drops of castor oil, given every hour in water with sugar and gum, is an excellent remedy.

The Oncome of Age.

There are many conditions of advancing life in which

Fellows' Syrup of Hypophosphites

is beneficial, viz:—

DISEASES OF THE

Assimilative Organs. **Circulatory Organs.**

Respiratory Organs. **Nervous System.**

The value of a **stimulant** in the enfeebled digestion of the aged has been recognized from the earliest time.

For those who decline to accept the aid of wine, and who need something of a stimulant character to rouse the flagging powers of digestion, **Fellows' Syrup of Hypophosphites** offers special advantages. In all conditions commonly met with in persons of Advancing Life, a tonic like **Fellows' Syrup** is clearly indicated.

Dr. Milner Fothergill wrote: "It (**Fellows' Hypophosphites**) is a good all-around tonic, specially indicated where there is **Nervous Exhaustion.**

SPECIAL NOTICE:—**Fellows' Syrup** is advertised only to the Medical Profession; is never sold in bulk, and physicians are cautioned against worthless substitutes.

Medical letters may be addressed to

Mr. Fellows, 26 Christopher Street, New York.

Ureteral Calculus Simulating Vesical Calculus.

Francis J. Steward (The Hospital) recently related a case of this kind before the Clinical Society of London. The patient, a man twenty-four years of age, had suffered from painful micturition and hæmaturia for three years, the attacks gradually getting more severe. A little pus was found in the urine before operation. The pain with micturition was severe and situated in the perineum and at the end of the penis. Radiographs were taken and the bladder sounded with negative results. The bladder was opened supra-pubically after inflating with air, and a stone felt impacted in the right ureter two inches from its vesical orfice. The stone could not be moved down, so the wound was closed. Three weeks later the abdomen was opened through the right linea semilunaries. The stone was then pushed up the ureter to just above the common iliac artery and removed by incising the ureter. The ureter was closed by a continous silk suture of No. o Chinese twist passing only through the outer coats, and the peritoneum was sewn over it. A gauze drain was left passing to the sutured part of the ureter. Uncomplicated recovery followed. Steward remarked that the chief point of interest was that the symptoms pointed to vesical calculus and were at no time unilateral. The air distension rendered the supra-pubic cystotomy very easy, the peritoneum being well lifted up, and the absence of the usual flooding of the wound on opening the bladder was a great advantage. The gauze drain had been put in from the front to avoid turning the patient over and cleansing the skin, as he was already exhausted.

The Bryan Ratio of Sixteen to One.

S. F. Wher, M. D., of Belleville, Ill., late Surgeon U. S. A., says: "For upwards of ten years I have been using and prescrbing Sanmetto for almost all kinds of genito-urinary troubles. I have never found anything its equal. In chronic cases of gleet it cannot be excelled. In all kidney troubles its action is fine, relieving the backache, etc. I could not get along without keeping it upon my dispensing shelf. Hundreds of empty bottles are in cellar I would exchange for filled ones at the Bryan ratio of 16 to 1. So much for Sanmetto."

"Christian Scientists" not Insurable.

It was lately noted that the fraternal beneficial organization known as the Knights of Honor had ruled that persons believing in the doctrines of so-called christian science would not thereafter be received into membership. This action was taken because it was seen to be reasonable not to take any risks upon the lives of persons who refuse to avail themselves of medical knowledge when they are ill. It is now learned that the Mutual Life Insurance Company of New York refuses to issue policies upon the lives of "Christian Scientists." For insurance purposes they are being classed along with habitual drinkers and with those who follow hazardous occupations.

Dr. Wharton Sinkler, in making a plea for the more general attention to nervous diseases (Phiiadelphia Medical Journal) calls attention to the prodromal symptoms of the more common nervous diseases. These the general practitioner is very apt to overlook, and this, too, at a time when, if at any, the patient might be benefited. The excuse is given that the study of the nervous system is too difficult and should be reserved for those who devote their whole time to these diseases. But in thus excusing ourselves we overlook the important fact that it is to us the nervous patient first comes. After all, the study of the nervous system should not be more difficult than that of any other, and if we know its anatomy and physiology we should be able to figure out for ourselves the lesions causing the phenomena present. The doctor's plea is timely and should bear fruit in more attention being given to this class of sufferers.

Treatment of Rectal Prolapse in Children.

Dr Hajech, in the New York Medical Journal, recommends the use of ice in prolapse of the rectum. A tapering piece of ice about three inches long and about an inch in diameter at the thick end is wrapped with iodoform gauze and its point is pressed gently against the center of the prolapsed mass until it is replaced. The ice tampon remains in the rectum without the use of any retentive bandage, provided it is pushed in far enough. A fresh piece of ice is employed in this way after each act of defecation. This treatment soon cures the prolapse. It seems to act by emptying the blood-vessels in heightening the contractability of the rectum.—*Courier of Medicine.*

The attention of our readers is called to the advertisement of Robinson-Pettet Company, which appears in this issue.

This house is one of long standing, and enjoys a reputation of the highest character. The preparations referred to, we commend specially to the notice of Practitioners.

The Charlotte Medical Journal.

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Hay Fever. Its Etiology and Treatment.

By James Sawyer, M.D., Asheville, N.C, Member American Medical Association, Mississippi Valley Medical Assocaition, Society State of N. C., Bumcombe Co. Medical Society,etc.

Hay fever, (variously known as June cold, "Rose" cold, Hay Asthma and Autumnal Catarrh, and also in more scientific terms Rhinitis Hyperaesthetica and Catarrhus Aestivus) is an affection of the upper air passages due to the action of certain external irritants upon a hyperaesthetic mucous membrane. It is one of the neurosis recurring periodically at certain seasons, especially during the summer and early autumn months. It is characterized by an irritation of the mucous membrane of the nose, eyes and upper air passages and accompanied by excessive secretion. It is frequently associated with asthmatic attacks. The nasal mucosa is highly congested and swollen, the conjunctivæ are involved, and frequently the frontal sinus and the respiratory tract, also.

There are two forms of hay fever,—one the "Rose cold or June cold," prevails in the earlier summer months, May and June, and is less severe and somewhat shorter in duration, lasting generally about six weeks. It occurs about the time that the pollen of the rose is most abundant. Hence the name "Rose cold." The second, autumnal form, prevails during the later summer, and early autumn months, especially during August and September, and is more severe in every way. The attack in each form very presistantly and frequently recurs on a specified date, as often times the patient knows just exactly the day, and frequently the very hour when the attack will begin. This is undoubtedly due to the nervous element, as they look forward to having it at a certain time, and therefore have it then. It occurs in men more frequently than in women (about 3 to 1) and is more frequently met with in brain workers, professional men, and those with high strung constitutions, than in the laboring class. It is more frequently found in residents of towns and cities, than those who live in the country. It is most frequent between the ages of 15 and 35, though no age is exempt. Hay fever is a symptom complex, due to a particular irritability of the nervous system, which in turn is due to a nervous adynamia, either inherited or acquired, supplemented by a localized abnormal sensibility of the whole or a part of the respiratory mucous membrane.

There are three important factors in the etiology of hay fever. First: the nervous temperament. Second: an irritable nasal mucosa, and third: the stimuli, which are generally some irritating substances suspended in the atmosphere. These irritants are of great variety, some affecting certain individuals, and other exciting the attacks in a different class of sufferers. Different odors, as of roses, and other fragrant flowers and plants—and especially pollen of flowers, grasses and weeds, (the most conspicious of which are golden rod, Indian corn, Rag weed and hay) constitute the chief irritants, though dust and smoke are also important, and certain chemicals, such as the dust of Eycopodium-Ipecac, Belladonna, Opium, Scalicylic acid, etc., will produce an attack in certain susceptible individuals. Bright sunshine, excessive heat, dampness, and sudden changes in temperature will also bring on an attack. The imagination, (Psychical impressions) freqnently may play an active part in the causation of the affection, as is instanced by the fact that the proximity of an artificial flower and the sight of a painted rose have been sufficient to bring on an attack. Heredity plays an important role in the etiology, too, as hay fever is oftentimes observed in several members of the same family for several generations, especially in those with a neurotic taint. Certain pathological conditions in the nasal passages (exostoses, polypi-adenoids, diflections of the septum, hypertrophy of the soft parts, and excessive hyperaesthesia) constitute a very important and persistant class of causes of hay fever. Stenois of the nasal passages so impairs the respiratory function of the nose, that the spongy erectile tissures over the turbinates become engorged and a state of vaso motor rhinitis ensues under the influence of the various external irritants.

Later especial reference will be made to

the results of trertment based upon this mechanical theory, showing how the supra renal gland by causing just exactly the opposite state of affairs, on account of its action as an astringent by its exsanguinating power, relieves the turgescence and is therefore the natural antagonist to hay fever.

The chief predisposing causes of hay fever are the diseases of childhood, and the disorders inherited or acquired, which tend to induce a lowered cellular activity in the nerve centres presideng over the physiological processes of the upper respiratory tract. Thus the rheumatics and gouty uric acid diathesis, being the result of deficient cellular activity are important predisposing causes, since they are capable of promoting the vulnerability of these nerve centres.

There are two well marked types of hay fever, catarrhal and asthmatic, each requiring different modes of treatment. The catarrhal form usually comes on suddenly with an irritation of the mucous membrane of the eyes, nose and throat, accompanied by frequent sneezing. In the asthmatic type which seldom develops until the patient has suffered for three or more seasons from the catarrhal form, the asthmatic symptoms may develop very early, though usually not until the nasal symptoms have existed for several weeks. As soon as the asthma does develop, the nasal symptoms frequently disappear, and do not retnrn during the season. This asthma usually occurs in the day time, instead of at night, and is worse on hot damp days. When the supra renal glands is used early and persistently in these cases, the asthmatic tendency is diminished, and frequently the asthma will not develop at all. But when asthma has already developed before treatment with the supra renal gland has been instituted, the results are not so good, although good results may exceptionally be obtained even here.

The treatment of hay fever may be considered under three heads: Climatic, General Medicinal or Tonic, and Local.

Climatic.—A change of climate unquestionably does a great deal of good, modifying, checking, and often times even preventing the expected attack. Dwellers near the sea shore should seek the mountains, and vice versa. A sea voyage is frequently very beneficial. The best results are obtained in the general run of cases, by going to a mountainous region, to a plateau of moderate elevation where there is plenty of pure dry air, and a minimum amount of dust, smoke, and pollen. Agricultural regions should be avoided, as they are liable to aggravate the attack. Travelling, both just preceding and during an attack of the disease, should be avoided as much as possible; but if it is necessary, the insertion of pledget of absorbent cotton, wet with a weak cocaine solution into the nostrils, affords the best protection against the irritation of smoke and dust.

Asheville, N. C., is almost an ideal place for hay fever sufferers, and it is already the Mecca of many of them, who have sought and found here the greatest relief from their tortures. Many more are coming each year, as the advantages of the place are becoming better known and understood.

The general medicinal or tonic treatment is of great importance, since the disease is in most instances a neurosis. Hence the remedies which improve the stability of the nervous system should be employed in the properly selected cases. Arsenic, strychnine, quinine, phosphorus, iron, cod liver oil, the valerianates, bromides, atropine, opium, etc., all have their proper places, and have proven beneficial when intelligently exhibited. In the cases due to the gouty or uric acid diathesis, appropriate treatment by lithia, the alkalies, and the salicylates, given to aid the elimination of the products of water give good results. The supra renal capsules, given internally, seem to have an especially happy effect in these cases.

We must regulate with the greatest care the habits of the patient, both as to his food and exercise, as well as his general hygiene. Cold morning plunges, followed by a good rub-down, and an ante-breakfast walk, have a wonderful influence for good in toning up the whole system. Then when the unstable nervous system is thus steadied and invigorated, the digestive tract restored to a normal functionating condition, and the general nutrition established upon a firm foundation, the patient is enabled to resist such disturbing influences as once eminated from the contact of the atmospheric irritants with the hyperæsthetic nasal mucous membrane.

Under this head we may also consider the prophylactic treatment, which consists in using selected tonics during the 2 or 3 months immediately preceding the time of the expected attack, to tone up the nervous system; and also in treating the nose locally by thoroughly cauterizing the sensitive spots, removing any abnormalities existing, and getting the mucous membrane into as perfect a condition as possible. Strychnine in gradually increasing doses is probably the best tonic to counteract the nervous condition, though the valereanates, quinine, asafœtida, arsenic, etc., are very useful. Atropine is of great service to prevent an at-

tack. If 1-100 grain is given on the morning of the expected attack and again in the evening, if indicated, and then once a day as long as necessary it will frequently prevent the paroxysm. The various sprays (to be hereinafter mentioned) are useful when combined with atropine thus used internally.

It is of great importance to examine the nasal cavities and remove all abnormalities existing, for the most satisfactory results follow their removal. The hypersesthetic condition of the mucosa may be removed by appropriate surgical treatment and thus the disease may be cured by removing one of the three causative factors.

This brings us to the consideration of the third form of treatment, the local treatment, which is not less important than the second or tonic form. All abnormalities, such as polypi, adenoids, etc., should be surgically removed. Any unduly sensitive spots found in the intra-nasal mucosa, especially on the middle turbinated bone, should be thoroughly cauterized by gently passing over them a probe medicated with glacial acetic acid. This process should be repeated every three days during the few months immediately preceding the expected attack until no sensitive spots remain. Galvano cautery and chromic acid may also be used, but the glacial acetic acid has proved more satisfactory, in that it is not followed by the local dryness and cicatrical induration which so frequently follow the use of the former too when applied over the broad areas; although when used to sear the smaller areas (not over ten to fifteen millimetres in diameter), the galvano cautery is probably the best method. However, great care must be taken in using it that a guarded flat electrode be used so as to prevent burning the opposite wall, and also that the cauterization be entirely superficial so that the mucous membrane will not be destroyed and no cicatrical tissue left.

At the beginning of an attack frequent washing of the eyes with boric acid solution or some other non-irritating collyrium is grateful to the patient. The acute catarrhal inflammation of the nose may be temporarily relieved by a mild cocaine ointment, but great care is necessary in using cocaine lest the patient discover what is being used and thus contract the habit. Hence, I have almost discarded the use of cocaine in this condition and use the supra renal gland instead and get most satisfactory results therefrom, as its action is very similar to that of cocaine, inasmuch as it shrinks the vessels, squeezes out the edema, diminishes the size of the erectile tissue and hypertrophied masses and thus stops the coryza and pain, and besides there is no danger of its ever causing a habit and it has no bad after effects.

Frequent nasal inhalations of the vapor of eucalytus, creosote, iodine, carbolic acid, tinct. benzoin, comp., etc., in boiling water sometimes do good. Chloride of ethyol sprayed on a blotter and inhaled is effective at times, as is also the inhalation of chloroform and alcohol. Before the advent of the supra renal gland in the realms of therapeutics, I had placed great reliance upon the use of sprays and nasal douches, and I still use them and get good results from them too, though the supra renal gland has superceded them to a great extent in my practice My favorite sprays were combinations of menthol, salol, camphor, encalypthol, and in very acute cases the alkaloid of cocaine, with glymol as the base, menthol giving the greatest all-round service. As a nasal douche, Siler's & Dobell's solution, and especially glycothymoline (used in the Birmingham nasal douche) gave much satisfaction, especially when followed by an ointment of Eucalyptol drachm 1-2, menthol grs. vi, and vaseline one ounce, applied to the nasal mucosa. Zinc oxide ointment is useful to protect the lips and nostrils from the irritating effects of the acrid nasal secretion.

For some time past my great reliance has been and is the powdered dessicated suprarenal gland. Its action is promp,reasonably certain and most wonderful in its effect upon the patient, quickly drying up the secretions, opening the stenosed nostrils by reducing the swelling and turgesence by its vaso motor action constricting the blood vessels, blanching the mucous membrane, thus relieving the edema and coryza, stopping the pain and clearing up the head almost as if by magic. The patient experiences almost immediate relief which lasts for two or more hours. In bad cases it is frequently necessary to use the gland locally and internally every two hours until the vaso motor paralysis is controlled or slight vertigo, palpitation or nervous excitement ensue, which would show that the full physiological effect of the remedy has been obtained. I generally use from 3% to 10% solution locally by spray or on cotton and repeat whenever the symptoms demand it, and from three to ten grains of the dessicated gland in capsules internally. The best results are obtained from thus using it both internally and locally, though very satisfactory results may be obtained from using it internally only. Then it is best to give five grains every two hours until the full physiological effect is obtained or the symptoms are controlled, then every three or four

hours, then every six hours, then three times daily, and then twice daily throughout the hay fever season.

The cases in which the best results may confidently be expected are in subjects having neuroses, together with nasal lesions, and in neurasthenic subjects having general vaso motor disturbances; also in the simple cases where the symptoms are chiefly those of inflammation of the eyes, nose and pharynx. The relief is most marked in the cases in which there are nasal lesions, accompanied by intense nasal engorgement and bronchial congestion; and the less the congestion the less the benefit received. The suprarenal gland is almost an ideal remedy for hay fever because it restores the nasal erectile tissue to its normal condition and most efficiently controlls the vaso motor vessels of the nose. Those who use it are delighted with its effect and constant use only makes us esteem it all the more.

Brain Softening.

By Michael Campbell, M.D., Knoxville, Tennessee.

It is not my purpose to treat exhaustively the subject of brain-softening, as it would far exceed the limits of an article proper, but to describe briefly the ordinary development of the disease, and give an account of a case that recently came to me for treatment, and which illustrated one of its rarer forms. As most cases of brain-softening are caused by occlusion of its blood vessels, I shall very briefly call your attention to the cerebral circulation:

The brain receives its large supply of blood from the vertebral and internal carotic arteries, which form, by their divisions, the cerebral and cerebella arteries. The sub-divisions of these last named vessels, besides supplying the ventricles, ramify in the pia mater. This membrane is thrown over the brain like a net, dipping down into the sulci of the convulsions, and sending blood vessels to the white matter of the interior, both from below upwards and from above downward.

The gray matter, both of the cortex and basal ganglia, because of its greater functional activity, is more abundantly supplied with blood than the white. Softening of nerve tissue consists in, and is due to the breaking up of the element, the resulting particles become saturated with serum, so that a soft pulp replaces the original firm tissue. This is the characteristic effect of inflammation, most often seen in the local inflammation following hemorrhage of the brain. Formerly all softening was thought to be the result of inflammation, but it is now known that in the majority of cases, it is caused by the occlusion of an artery, vein or sinus, cutting off the blood supply from the part beyond the place of obstruction. These obstructions are caused either by an embolism, or thrombus. An embolism may be described as a plug in an artery of the brain, which has come from a distance, usually from the heart, and is an evidence of disease elsewhere than in the brain, while a thrombus is the effect of local disease of an artery in the brain, by which its caliber is narrowed or its intima roughened, so as to cause coagulation of the blood. The chief causes of these changes in the inner coat of an artery that causes thrombus are atheroma and syphilis. The source of a plug in embolism may be anywhere between the lungs and the brain; detached material from a pulmonary abscess may come through the pulmonary veins to the left side of the heart, and from there find its way to the brain. Or it may be the result of an endocarditis, ulcerative or rheumatic. In these cases, Gowers says that there are frequently vegetations on the valves which may become detached, and thus washed into the blood current. Softening is divided into three classes, red, yellow and white. Red softening is found generally in parts where the blood vessels are most numerous, in the cortex and ganglia. Yellow softening comes from red softening by degenerative changes. White softening does not differ from the color of white matter of the brain where it is found. Its consistences variable, sometimes diffluent, but more frequently like firm ice cream. The most frequent seats of softening are the cortex, corpus, and optic thalamus, but any portion of the brain may suffer. Changes occur very rapidly after the occlusion of an artery. In one of my autopsies forty-eight hours after the attack, a large area of softening was found, the result of an embolus. The symptoms were those of an apoplectic stroke, with hemiplegia. The hemiplegia was with difficulty made out, owing to the prostration and unconsciousness of the patient.

When we consider the causes of the occlusion of the cerebral arteries, and remember how large a proportion of the human race suffers from endocarditis, syphilis and atheroma, the statement that softening is one of the most common of brain diseases, is not surprising. Neurologists generally hold that it is more common even than hemorrhage. The symptoms of cerebral softening in the majority of cases resemble strongly those of hemorrhage, and diagnosis of

softening is made rather from general considerations than the immediate symptoms at the time of the attack. Hemorrhage is improbable in a patient under forty years of age. If, in addition, there is a history of heart trouble or syphilis, the symptoms point strongly to softening, and the diagnosis may be made with reasonable certainty, the greatest difficulty is encountered in patients past middle life, for the greater probability of hemorrhage at that age is accompanied by atheroma and arterior sclerosis, which are causes of softening, given a case with full bounding pulse and flushed face, hemorrhage is indicated. Rather than softening, notwithstanding evidences of arterial degeneration, deep coma is also more characteristic of hemorrhage. Unfortunately, profuse hemorrhage causes pallor, and feeble pulse and in some cases of apoplexy in the aged, the most expert diagnosticians can only be sure, of the lesion after an autopsy, notwithstanding the difficulties of diagnosis in some cases of necrotic softening, no pains should be spared to arrive at the true nature of the lesion, as the initial treatment of softening differs radically from that of hemorrhage. In hemorrhage the indication is to lower the blood pressure, to quiet the action of the heart, and thus favor coagulation, while in softening coagulation is the foe to be dreaded and is best combatted by sustaining the action of the heart with digitalis and strophanthus. The above briefly described forms of brain softening is applicable to the ordinary development of the disease, and does not include certain rarer cases that have a different symptomatology, one of which recently fell under my notice.

There was brought on July 31st, 1900, to the Eastern Hospital for the Insane, near Knoxville, Tenn., Mr. M. L., aged twenty-nine. He had a history of syphilitic infection six years before his admission, and had gone to Hot Springs, Arkansas, for treatment. He was in charge of my colleague, Dr. S. R. Miller, during the fall of 1900, when nervous symptoms developed. He complained of severe pain at the base of the skull, and the head was abnormally sensitive to percussion. He also suffered with deep-seated pain apparently in the center of the cerebrum. His suffering was worse at night, when he would continually walk the floor. Later mental symtoms developed and he was sent to East Tennessee Hospital for the Insane, where, as stated, the patient arrived on the 31st of July, 1901. He had been treated by Dr. Miller with both mercury and iodide of potassium, and had improved, the result of the treatment was to relieve him from the severe pains in the head. Examination at the time of his reception showed marked dementia, and while there was no paralysis, there was a spastic condition of the muscles like that found in advanced cases of paralysis agitans, and he had the propulsive gait characteristic of that disease. On August six he gradually lost the use of himself, and became unconscious, but there was no complete paralysis, but rather a more pronounced spastic condition. His temperature ranged from 103 deg. to 105 deg. He lingered in this condition until the 10th of August, when he died. Autopsy twenty-four hours after death. The dura was strongly adherent to the base of the skull, with other evidences of former pachy-meningitis. A minute examination could not be made of the blood vessels, as the pia as well as the brain substance was torn when they were taken from the calvarium. While making thin horizontal sections of the right hemisphere at the distance of 1-2 an inch from the superior surface of the middle lobe, the knife passed into several lacunæ, entirely empty from the size of an average, to a large broom straw. They penetrated an inch or more down toward the basal ganglia. In the centrum ovale, half-way between the vertex and the corpus striatum, an area of softening was found, one inch deep, and into which the middle finger could be thrust. Other portions of the brain substance to the naked eye were apparently normal. Microscopic sections were not made. The early nervous symptoms in this case: severe nocturnal headache, etc., were evidently due to the pachy-meningitis of syphilitic origin. The lacunæ, an area of softening, were caused by syphilitic occlusion of the long arteries that penetrate downwards and inwards from the lateral and superior surfaces of the cortex for the nourishment of the white substance of the brain. These arteries do not anastomose with any others, but their occlusion necessarily results in necrosis of the parts that they supply with blood. The history of this case teaches that the physician should be cautious in giving a favorable prognosis in nervous disease due to syphilis, for while it is true that many severe paralyses caused by syphilitic inflammation and gummata respond brilliantly to anti-syphilitic treatment, the probability of incurable necrosis should not be loss sight of.

Cardiac Therapeutics.

By A. E. King, M. D., Blockton, Iowa.

It seems strange that in general practice

the circulatory system appears to be less understood than any other branch, yet I am led to believe such is true. When we think of the heart being a hollow muscular cone contracting and relaxing almost every second for about seventy years asleep or awake, is it any wonder that we stand before the Creator with consternation and awe? The contraction is made by a continuous figure of eight muscular contractions from above downward, it being a winding, ganglionic, peristalic action of the circular and longitudinal muscles from the base to the apex. The nerve supply being from two sources, the pneumogastric from the brain and the cardic sympathetic from the sympathetic ganglionic system, and for steady rythmical normal contraction of the heart both nerves must necessarily be in a perfect healthy condition. The pneumogastric says stop, stop, while the nerve in the sympathetic system says go, go; and between the two we get in healthy condition rhythmical action: while if one be stimulated we get deranged action. The cough in mitral regurgitation being due to fullness of the pulmonary vessels is relieved by digitalis. In tricupid regurgitation the blood flows back in the right auricle of the ventricle may be so distended as to have the valve of little use and stasis occurs and digitalis would be perfectly useless for we must have the object in front of the power and digitalis puts the work on the system by accomplishing hypertrophy and protecting the patient, but in tricuppid regurgitation it can not be so, does actual harm, therefore would give remedies to get the blood to the surface, as veratrum, belladonna, the nitrates or any mydriatic. We at times have functional fullness from which the patient may die as in croupous pneumonia when the lung is solidfied and dams the blood back to heart and we are unable to find the apex beat or at first dull and then shaking and then unable to find it because the right side is a bag of venous blood and the heart can not twist to form the beat while the left side is empty. How if we give digitalis we may cause instant death because the right side is weak and unable to contract on its contents as it has not the power. It is acting rapid and weak and suffering from carbonic narcosis then here is the place for our vaso motor dilators and especially glonoin, however veratrum is very good but aconite is dangerous. Another condition is where the heart may palpitate or skip every third or fourth beat it being quite a common condition and often find no leasion but is a functional disorder due either to the brain or stomach and we must discover which if no heart murmur. I believe four-fifths of all cases coming to us dyspeptics and the heart symptoms are caused by peripheral irritation of the pneumogastric. Smokers suffer from paralysis of the pneumogastric periphery and stimulation of the sympathetic being the opposite of nervous ferales. The sphlanic nerves act as regulators for the heart as the balls of an engine do for the fly wheel and if from any cause their action is destroyed we have a weak and very rapid heart which we call tachycardia and most often caused by anemia from continued fever then strychnia would be the remedy par excellence as it tones and strengthens the heart rythmically. Another conditionis angina pectoris a most painful and dangerous condition of the heart, for I believe it it caused by a degeneration of the heart muscle and nature in forming fat is doing more than we can do, but we can give strophanthus as it acts on the peipheral nevers and not on the heart, or belladonna, glonoin etc., but never digitalis for it will produce a tonic spasm of the heart muscle and the patient will die with the heart in systole.

If functional heart trouble remove peripheral irritation and tonics; If dying from debility, strychnia; If by means of mechanical obstruction, digitalis. If atheromattous digitalis never; as it will produce emboli by causing detachment of calcareous deposit.

In conditions where the whole nervous system is relaxed through paralysis of the vaso motor nerves with capillary congestion flushed face and cyanosis we should use medicines to crowd the blood from the capillaries to the heart and one thing we should not forget all medicines are acted upon or digested by the veins, food through the lacteals, then in a blood stasis it would be utterly useless to give medicine by the mouth, yet how often do we forget ourselves.

Gun Shot Wound of the Right Lung with Complications.

By A. M. Morrison, M. D., Goshen, Ky.

I was called, October 27th. 1897 to see Jimmie Taylor, colored, 12 years of age, who a few hours previously, while out hunting, received a wound from a shot-gun loaded with a full charge of powder and No. 5 shot. The contents entered his right chest, fractured the sixth rib near its cartilaginous attachment, and inflicted an ugly wound with extensive comminution of the rib. The entire charge of shot then entered the cavity, wounding the base of his right lung.

I found the patient with cough and labored breathing, with expectoration of a bloody frothy mucus, and with every indication of extensive lung lesion.

On dressing the wound I first removed several spicula of the fractured rib, and then packed the wound with 10 per cent. iodoform gauze. I continued my visits daily and dressed wound in same manner until November 2d. when I found a large accumulation of straw-colored serum filling the pleural sac With a flexible rubber catheter, I could syphon off most of this fluid. At this time he had an expectoration of rusty sputum, and on examination I found one-half of his right lung hepatized; his pulse was now 110; temperature 102 3-5; respiration 44 to the minute.

On November 9th I found empyema had set in. I then gave him 2½ grains of quinine, every four hours, and Tinct. Ferri. Chlor. 15 drops three to four times a day, and continued a liberal diet.

On the 13th of November found his breathing labored and 52 to the minute; pulse 130; temperature 104½ his general symptoms indicating a septic condition.

On November 14th, I resected 2 inches of the 8th rib, and inserted a rubber drainage tube. This was followed by a discharge of ten or twelve ounces of pus. I then washed out the cavity thoroughly with a solution of permang. potash, and continued dressings of iodoform gauze. From November 14th to December 4th, I irrigated almost daily, with the permanganate solution.

November 18th omitted the quinine and put him on Scotts Emulsion Cod-liver Oil, as he had for several years previous to accident shown marked symptoms of pulmonary tuberculosis, his mother, sisters, aunts and other near relatives having died of consumption.

On visiting patient December 4th I was surprised at not finding the strip of gauze still used in packing the shot wound. The wound had now nearly healed, leaving a tortuous opening about one-sixth of an inch in diameter. The last strip of gause used was only seven inches in length by two inches in width. For several days I had been rather careless in dressing the wound, and failed to secure the gauze to the bandage. I was satisfed in my mind that the gauze had been drawn into the thoracic cavity.

During the month of October, 1898 he served me as stable boy, and most of this time he had a dry cough, and occasionally he had severe and prolonged paroxysms of coughing in which he would almost suffocate. My suspicions were now aroused,and I feared the strip of gauze was a factor in the case, was probably giving rise to the severe and suffocative attacks of coughing. He attended school near the home of his grandmother in November, and part of December, 1898, and while in the schoolroom on December 10th he had a severe attack of coughing lasting for several minutes. Finally he coughed up something into his throat which he caught hold of with his thumb and fore finger, and which he pulled out of his mouth and threw on the ground with fright and disgust. I think I can positively declare the identity of this *long lost strip of gauze*, and that it was concealed in the lung or thoracic cavity of Jimmie Taylor from December 4th, 1897 to December 10th, 1898, over 12 months.

When expelled the gauze was round in shape with both ends pointed, and covered with a thick inspisated mucus, and resembled very much in appearance a large lumbricoid worm. I cannot say positively by what route it traveled, but it certainly reached the larger bronchi and was expelled in the manner described. What pathological changes occurred in the lung and pleural cavity I cannot determine. My belief is that the gauze was drawn into the thoracic cavity in a deep or forced inspiration, and coming in contact with the lung wouud adhered to it and was forced gradually into the lung by the contraction and cicatrization of the wound.

I am impressed with one fact, that whereas for several years before this accident the patient was decidedly and beyond doubt, tuberculous, as evidenced by cough, great emaciation, night sweats with apparent disintegration of the apex of his right lung. His condition is now much changed and improved, is free from cough, and to all appearance is a stout and healthy boy.

In conclusion I will ask, is it probable that the 10 per cent. iodoform gauze remained so long in the right lung could have exerted a germicidal and healing influence over the diseased apex of that lung?

Localization of Gall-Stones in the Gall-Bladder.

By Richard Douglass, M.D., Nashville, Tennessee.

Calculi may remain in the gall-bladder an indefinite time without producing symptoms. Usually, however, their presence is associated with erosion of the mucous membrane which opens an avenue for infection. The symptoms are then more attributable

to the cholecystitis and its complications than to the mere presence of the stone. It is asserted that colic is only awakened when the stone becomes engaged in the cystic duct. That hepatic colic may result simply from spasmodic contraction of a gall-bladder without the presence of a stone is proved by ample pathological evidence, yet it is true that pain, but not colic, is a symptom of calculus of the gall-bladder. Local tenderness over the gall-bladder is rarely absent, and if there is associate cholecystitis, this point-tenderness at the tip of the tenth rib is equal in diagnostic value to McBurney's point in appendicitis. If we place one hand on the left side and the other over the tube of the right side and forcibly compress the liver, pain will be felt in the region of the gall-bladder. A sharp thrust with the tips of the fingers, Lloyd's "liver-bump," will cause a stabbing, lancinating pain. There is no enlargement of the gall-bladder unless there is obstruction of the cystic duct. A tumor, however, may be felt, attributable to adhesive pericholecystitis; this is rather an area of induration than a distinct tumor. There is no jaundice or evidences of bile-stasis, though the liver may be enlarged. The indefinite symptoms of digestive disorders, constipation, nervous phenomena are usually present. Fever occurs with infection.

In the Cystic Duct.—The symptoms and physical signs, the outcome of impaction of stone in the cystic duct, depend upon the chronicity of the cholelithiasis, upon the acuteness of inflammation, and upon the cystic duct there occur the typical symptoms of hepatic colic. The obstruction offered by the small lumen of the cystic duct and Heisterian valves causes the smallest stone to excite muscular spasm in its effort to pass. The paroxysms recur until the stone successfully passes to the intestine, or until it recedes into the gall-bladder. Colic, then, is the primary and important symptom of calculus obstruction of the cystic duct. The attack is usually accompanied by vomiting, vital depression and constipation. A chill and fever are not unusual. There is no jaundice, yet in these cases careful urinary analysis may show biliary pigment. If there has been calculus disease of the gall-bladder with inflammation, existing for some time, then the viscus becomes thickened, contracted, and unyielding, a condition which will give a very different objective symptomatology from an acute obstruction with a dilatable gall-bladder. It must, therefore, be borne in mind that under some conditions of cystic duct obstruction there may be an absence of a tumor; but it cannot be said that it is the habit, although it is the occasional behavior of gall-stones to remain long quiescent in the gall-bladder, and hence usually in the obstruction of the cystic duct there is a dilatable gall-bladder and consequently a tumor. If the occlusion of the duct is absolute, no bile can enter, and the gall-bladder becomes filled with its own secretion, *hydrops vesicæ felleæ*. If there is infection from pyogenic germs the fluid becomes purulent, and we have empyema of the gall-bladder. If the obstruction is incomplete, bile may be admitted to the bladder, but be prevented from escaping; the fluid distending the gall-bladder would then probable be a mixture of pus, bile and mucus, and the tumor would rapidly form. The usual phenomena of cystic duct obstruction are paroxysms of pain, vomiting, possibly a chill and fever, though this is frequently absent, local tenderness, sometimes immediate and complete relief; or, if the obstruction remains, a tumor gradually forms. There is no jaundice. If the stone becomes impacted permanently, the paroxysms of pain subside, the vomiting ceases, but tenderness remains.

In the Common Duct.—Important in the symptomatology of calculus obstruction of the ductus choledochus is the history of previous attacks of biliary colic. It is true, the primary evidence of the presence of stone may appear as an obstruction to the common duct, but in its route from the liver, or from its almost invariable seat of origin, the gall-bladder, it does not reach the common duct without giving rise to colic. There are three elements concerned in the symptomatology of obstruction of the common duct: pain, bile-stasis and inflammation. The pain is more intense, if possible, when in cystic duct obstruction, and oftener referred, especially to the back more prolonged, and productive of greater shock. Vomiting is more obstinate, fever is usually present, and rigors are common. Jaundice develops within 24 to 36 hours after the onset of pain; the urine becomes quickly and deeply colored. Further symptoms depend upon special conditions. If the stone becomes firmly impacted in the common duct, the icterus deepens, the stools are decolorized, the liver enlarges, the symptoms of cholemia, the lethargy and extreme prostration are marked; for reasons repeatedly given there is no enlargement of the gall-bladder. If the stone is not impacted, but partially obstructs the common duct and is movable in the ampulla of Vater, the condition becomes chronic, and the occasional efforts of nature to compel it through the papilla produce recurring attacks of colic, jaundice, chills, fever and sweats, with or

without clay-colored stools. This is the *fievre intermittente hepatique* of Charcot, the symptomatology of which is thus briefly and acurately given by Osler: (1) Jaundice of varying intensity deepening after each paroxysm, which may persist for months or even years. (2) Ague-like paroxysm, characterized by chill, fever and sweating, after which the jaundice usually becomes more intense. (3) At the same time of the paroxysms, pains in the region of the liver with gastric disturbance. The interesting feature of this condition is the presence of the symptoms of chills, fever and sweats, without suppurative inflammation of the bile-channels or other lesions than dilatation and mild catarrhal cholangeitis. The greatest confidence by all surgeons engaged in this field of work is accorded to the group of symptoms as diagnostic of a movable or ball-valve stone in the common duct. It is asserted by many, by Brewer, especially, that all symptoms disappear in the intervals between paroxysms. I have seen three typical cases of this form of common duct obstruction two proved by operation; both of these patients were under observation many months, and the intervals between paroxysms would vary from two weeks to two months; bile was always present in the urine, the icteroid hue never entirely disappeared from the abdomen, and there was constant hypogastric discomfort or backache. Common duct obstruction is frequently associated with stones in the gall-bladder, and perhaps in the cystic duct; there are no means by which we can diagnosticate calculi in dual positions.

In the Hepatic Duct.—Calculi occupy the hepatic duct secondarily. They are usually associated with calculus obstruction of the common duct, and frequently with multiple calculi of the gall-bladder. The duct has been found packed with stones up to its bifurcation. Of fifty-nine cases of calculi in the hepatic duct collected by Courvoisier, fifty-six had stones in the gall-bladder and common duct as well. The symptoms are not specially diagnostic, and differentiation cannot be made from common duct obstruction. There is atrophy of the gall-bladder, consequently no tumor, enlargement of the liver, jaundice, pain paroxysmal, remitting but not entirely intermitting, and usually fever from cholangitis, which may become suppurative in character, leading to multiple hepatic abscesses and pyemia.

In the Intra-Hepatic Ducts.—Stones in these ducts cannot be diagnosticated *in vivo*.

The Surgical Treatment of Painful Menstruation.*

Henry D. Fry, M.D., Washington, D. C.

Pain should not occur at the menstrual period in a healthy woman with healthy pelvic organs. This dual relationship between the general health and the generative organs must be constantly kept in mind. One or the other may be at fault or the trouble may be with both in the same cases.

The treatment of purely medical cases does not come within the scope of this paper. In such as demand both medical and surgical care it is important not to overlook the former. The concentration of the attention too closely to the surgical aspect of the case is often the cause of failure to give relief.

Surgical treatment carries with it the necessity of making an examination of the pelvic organs. As these sufferers are nearly always young girls or unmarried women, the indications must be clearly manifest. The character and severity of the pain, its duration and the condition of the patient during the inter-menstrual period must be considered.

What results can be expected from surgical treatment? If we judge by the pessimistic statements of some men of large experience it is nothing to be proud of. In the discussion of this subject at the last meeting of the American Gynecological Society, held in Chicago, the reflected opinions presented a gloomy picture for the women. My object in presenting this paper is to protest against that verdict rather than offer any original method. My experience has been just the opposite. Failure to give relief has been due, as a rule, to some complication the removal of which subsequently resulted in cure.

This line of treatment followed with such satisfactory results is that pointed out in the main by Dr. Wylie.

First, thorough dilatation of the cervical canal; then the endometorim is gone over carefully with the sharp curette; irrigation and often a second curettage; the application of pure carbolic acid; irrigation and dilatation repeated if necessary. A Wylie drainage plug as large as will readily pass, is inserted into the cervical canal and kept in position by a Smith pessary. For a number of years I was accustomed to leave the plug *in situ* six days, but following the suggestion of Dr. Wylie, I now allow it to remain from three to six

*Read at Southern Surgical aud Gynecological Society Richmond, Va., Nov. 12, 13, 14, 1901.

weeks. I usually keep the patient in bed two or three weeks after the operation and if no discomfort be experienced, permit her to get up and go around wearing the plug several weeks longer. I believe the use of the hard rubber plug does much to aid in the permanancy of the relief obtained. It causes the formation of a cicartrical ring of tissue at the point of constriction which ensures patulency. I have not seen any bad results follow its use. In a few cases it causes pain and on that account must be removed sooner than the time mentioned.

I attribute the failure of those who deplore their results to the omission of some important point in the technique of the operation. For instance, they simply dilate the cervix or dilate and curette. Another cause of failure is the unfortunate division and subdivision of the disease into varieties, each variety being described with its appropriate method of treatment. The desire to avoid empiricism has made the subject complex and unpracticable.

For all necessary purposes dysmenorrhea can be divided into two classes; simple and complicated. The simple comprises about 80% of the cases that come under our care, and the treatment described cures or greatly relieves three out of every four.

The conditions usually found on examination are as follows: The external genitalia are undeveloped; the vagina, cervix and uterus are small. There is stenosis of the cervical canal and endometritis. The uterus is normal in position or one of exaggerated anteflexion; it is movable and the appendages are healthy. The accompanying endometritis is chronic in character and due to deficient drainage of the cavum uteri in consequence of stenosis of the cervical canal. The undeveloped condition of the generative organs in young women is very common and parallel to deficient growth of the mammary gland and its consequent falure to perform the functions of lactation.

The second class comprises the cases in which some complication exists. It may be displacement, small fibroids in the body of the uterus, or disease of the tubes or ovaries. These complications must be recognized and corrected. In a very small proportion of cases, as in cirrhotic ovaries, we are driven to produce the menopaus artificially. In such cases, I believe it advisable to amputate the uterus at the same time, as the subsequent reflex nervous symptoms are diminished and the period of suffering shortened.

I maintain that the surgical treatment here described as applicable to a large percentage of cases of painful menstruation, is not empiricism. We must recognize and exclude cases due to constitutional causes, and must recognize and give other treatment appropriate to any complication that exists in other cases.

Spina Bifida.

By J. W. Henson, M. D., Professor of Anatomy and Demonstrator of Orthopedics, University College of Medicine, and Surgeon to Virginia Hospital, Richmond, Virginia.

I have become very much interested in spina bifida for three reasons:

First, becuse so little has been done for it until recent years, which fact should make us feel the weight of a great responsibility for neglect of such a sad physical affliction.

Secondly, the praiseworthy effort, on the part of some surgeons of to-day, to alleviate or cure this affection, which effort and the goodly number of successes found in its wake promise that continued labor and thought will result in even greater developments in this line.

Third, because I have had the means of studying the subject objectly.

In order to discuss intelligently the treatment of spina bifida, it would be well to review its pathology and clinical manifestations. The arch of a vertebra develops by two primary centres of ossification, one for each lamina. By local arrest of development, there may be non-union posteriorly between the lateral halves of one or more of the spinal membranes. There may be a gap in the skin or in the spinal cord itself. There is usually in any case a protrusion of some of the spinal membranes through the gap in the bone, with or without a part of the cord or some of its nerves. The gap may occur in one or several vertebrate. It occurs more frequently in the lumbar or lumbo-sacral region.

Perhaps the best classification of the pathological fiindings is as follows:

I. *Spina Bifida Occulta.*—Here there is a cleft in the bone but no protrusion. This condition is rare and may be dismissed from consideration with the statement that, when it is complicated by paralytic disturbances, they are due to compression of the cord by fibrous bands which should be freed by an operation

II. *Meningocele.*—In this form there is a

*Read before the Medical Society of Virginia, Nov. 7th, 1901.

protrusion of spinal membranes with cerebro-spinal fluid, but no nerve elements.

III. *Meningo-Myelocele.*—Here there is, in addition to membranes and fluid, a protrusion of nerve elements. The cord and nerves may be free in the cavity, or the cord may be adherent to the posterior wall of the sac, while the nerves are either free or run in the lateral walls.

IV. *Myelocele.*—This is fortunately rare. In this case the fluid is in the central canal of the cord, the canal being dilated and the cord ballooned out as the inner lining of the sac.

V. *Fistulous Spina Bifida, for want of a better name.*—Here, there is a gap in the skin and some of the spinal membranes, and the cerebro-spinal fluid is constantly being discharged on the surface. The subjects live only a few days. This is also very rare, and may be dismissed with the feeble hope, that some one may, in the future, suggest something for its relief.

There are now left, for study, three varieties, Meningocele, Meningo-Myelocele and Myelocele.

With regard to these, the following clinical facts should be noted. The tumor may be very small, or as large as a cocoanut. It may be soft and covered by thick skin, or it may be very tense, with thin walls. As a result of stretching, the skin over the distal half of the tumor may be like parchment, while over the proximal half it may be thick but so intimately adherent as to almost defy dissection. The skin may be absent and the surface covered with granulations, or there may be ulceration and perforation.

The tumor may be sessile or pendunculated (Young). The sessile tumor suggests a wide gap in the bones, a large neck to the sack, and the presence of nerve elements. The pendunculated tumor suggest a small gap in the bones and that the sac is of the meningocele variety, with a small neck. The gap may be so small that communication between the sac and the spinal cannal is quite cut off. It is impossible to diagnose positively the absence of nerve elements. It is well to remember that, in all varieties, the dura matur may or may not be one of the coverings of the sac.

Spina bifida is often comclicated by some congenital malformation such as talipes, hare-lip, hydrocephalus or some nervous disorder, such as paralysis, trophic ulcerations, etc.

The treatment of spina bifida is palliative and radical. The former is employed when the latter is to be deferred or is declined. Its purpose is two-fold, to protect and to exercise compression. It may be employed in the form of a cup of some flexible material, fitted to the tumor, padded with cotton wool, and fastened on by adhesive strips and a roller bandage, with sufficient firmness to produce some compression. This may not only prevent the growth of the tumor, but actually lessen its size. It very occasionally results in a cure. An excellent dressing is that employed by Dr. A. M. Phelps, of New York, who makes a plaster of Paris case to fit the tumor, pads this with absorbent cotton, and fastens it on by a band of plaster of Paris around the case and body. There are two plans of radical treatment, to inject an irritant, or to excise the sac. Morton's fluid, consisting of ten grains of iodine and thirty grains of potassium iodide to one ounce of glycerine, is the irritant now used. The plan is to draw off two drachms of fluid from the sac, and inject the same amount of Mortan's fiuid, repeating this every ten or twenty days until inflammation ceases or the sac is obliterated.

While this treatment has made some cures, yet I feel constrained to condemn it, in no uncertain terms. It should be relegated to the plane of the injection treatment for hernia, than which it is no more scientific and far more dangerous. In injecting for hernia, there are many chances of missing the peritoneal cavity, but in injecting the sac of spina bifida, the intraspinal structures can only avoid being injured, in the very rare instances, in which the neck of the sac is impervious.

I agree with Dr. Bayer, who has made a careful study of the subject of spina bifida, that there are many points of resemblance between this conditiou and hernia, and that practically the same treatment is indicated, viz : excision of the sac, with replacing the nerve elements, if there ar any present, ligation or water tight suturing of the stump and closure of the opening in each of the overlying tissues as far as practicable. Various methods have been used for closing the gap in the bones, such as attaching chips from the ribs,or a chip from the crest of the ilium (Robroff(, cutting through the bases of the laminæ and drawing them together by sutures, or springing into the gap a piece of celluloid or ivory (Park). All have been generally successful.

It seems eminently proper here to give the opinions of various authorities, on the excision treatment, as well as the results of its employment.

In 1892 Monod[1] reported a case treated by this means with perfect recovery. He also collected thirty cases similarly treated with success. Jalaguier,[1] Perier,[1] Rochet,[2] Robroff,[2] Marcy,[3] Reid,[3] Whitehead,[4] and

Clutton[4] each report successful cases. Gardner[1] reports a death due to leakage of cerebro-spinal fluid, following the operation. Nicoll[4] expresses a preference for excision, after observations upon a series of thirty cases, though I do not find a report of the success in these cases. Ruyter[1] analyzed twenty cases—of eight operated upon, five died, twelve not operated upon, all died. Three of the deaths were caused by leakage of the cerebro-spinal fluid.

Hildebrand[2] analyzed thirteen cases operated upon, three of them Myeloceles (Myelo-Cystoceles). Three died from the operation. One died shortly after leaving the hospital, and another died three months later, from recurrence and hydrocephalus. Two of the eight cured were Myeloceles (Myelo-Cystoceles).

Powers advocates excision, having collected statistics showing a mortality of 26 per cent. Dr. A. M. Phelps has operated upon five cases with three cures. Dr. Royall Whitman, of New York. favors excision, Dr. Roswell Park, of Buffalo, reports four cases—three completely successful. One recovered from the operation, but died four or five months later from some other disease. Dr. J. K. Young, of Philadelphia, reports a successful case. It seems needless to enter into any argument that excision shcnld be practiced, for the permanent cure of spina bifida. The method appeals to any surgeon of thought as the most scientific used, and results prove its practical superiority.

Two questions now suggust themselves. When shall the operation be done, and are there any cases to be excluded? I shall answer the second question first. Though Hildebrand[2] discards as hopeless all cases with extensive paralysis, I should give them the benefit of the doubt. As they would certainly die without the operation, they could not be harmed by it, and they might be helped. Robroff[2] reports amelioration of paralysis after the operation. Let us have in view the relief of human suffering and not making statistics.

Of the three varieties of spina bifida under consideration, I should exclude none from operation, except possibly those cases complicated by hydrocephalus. The question of when to operate was discussed incidentally, by the orthopedic section at the last meeting of the American Medical Association, The concensus of opinion was that the operation should be delayed if possible, until the child is six or seven years of age. There are good reasons for this, the best one, of course, being that an older child can better resist the shock of an operation. I endorse delay in favorable cases, but very large tumors, with extremely thin walls, tumors which grew rapidly, in spite of proper palliative treatment and tumors complicated by paralysis should be operated upon at once. In the case of a tumor, with a raw granulating surface, this should be heal'ed, if possible, before operating, but if perforation is imminent from ulceration, operate promptly, rendering the surface as clean as possible by rubbing in carbolic acid, followed in one minute by alcohol—then a coat of collodion.

I have said that I agree with Dr. Bayer that there are many points of resemblance between spina bifida and hernia, but I do not agree with him that the analogy is complete, nor do I, by any means, endorse his statement that the open operation for the former is safer than the operation for the latter affection.

There are a number of conditions which make the operation of excision of the sac in spina bifida an exceedingly dangerous one. The best statistcs show a discouraging mortality rate. At some time, some one will find means to lessen the power of these deadly influences. I sincerely hope that if the suggestions I shall make along that line are worth little, in themselves, they will, at least have the effect of arousing thought and action.

What are these dreaded conditions? 1. The age of the patients and the length of time they are subjected to the shock of an anesthetic, and a traumatism of decided proportions.

One must see an operation to realize what a hole is make in an infant's back. The time occupied in working in this hole, will influence the final result.

2. The sudden removal of intracranial tension by loss of cerebro-spinal fluid during the operation. This sudden withdrawal of pressure will affect the central nervous system (chiefly, I think, the brain) not only directly, but indirectly through the local circulation, for the blood vessels, occustomed to a long continued and high degree of pressure upon their walls, will relax, become engorged with blood, and will not soon accomodate themselves to the new conditions.

3. The danger of leakage of cerebro-spinal fluid, following an operatiod and consequently exhaustion.

4. The shock from handling the cord or nerves when present. I don't recall having seen any reference to this, in any writing on spina bifida except in the Manual of Surgical Treatment—Cheyne and Burghard, but it is worthy of a place in the list of dangers.

I made careful observations upon these

conditions and their influence, in a case I recently operated upon. When the infant first came under my care the tumor, which was in the lumbo-sacral region, was small, soft and its walls were very thick, except at one point.

My advice was to defer the operation. Dr. Stuart McGuire saw the little girl with me, when she was three or four months old, and concurred in this opinion. When I saw her again, over two months later, the tumor had grown rapidly. Its walls were tense and alarmingly thin on top. I advised not deferring the operation any longer Dr. George Ben Johnson saw the case with me a few days later and gave the same advice.

As soon as arrangements could be made I took the infant, then about six or seven months old, to the Virginia Hospital and operated.

After the usual careful preparation of the tumor and surrounding area, hot water bags were put under the little patient, and the unexposed parts wrapped in blankets. The usual elliptical incision was made around the tumor, where the skin appeared to be normal. The latter was healthy but adherent to the sac. Dissection was so tedious that I made another incision as low down as the hope of afterwards uniting the flaps would permit. The same condition existed there. In fact, I found what is not infrequently true, that, over the proximal half of the tumor, the skin, while healthy and in good condition for a flap, was devoid of underlying connective tisssue and directly adherent to the sac.

After the latter was entirely freed, it was punctured and the opening carefully enlarged in order to examine the conditions present. Examination revealed the fact that I was dealing with a Meningo-Myelocele. The cord was lying in the posterio wall of the sac, but the nerves of the canda equina were free for a short distance, finally reentering the walls laterally. The infant did fairly well until the sac was punctured, but, a minute or two after this, shock was pronounced and when I began to dissect the nerves from the walls, as recommended by most authorities, respiration stopped for half a minute and death seemed iminent.

As soon as it was possible to proceed, I declined to handle the cord and nerves, but separated the dura from the rest of the sac, clipped off the superfluous arachnoid, with scissors, and replaced what was left of this membrane with the cord and nerves in the spinal grove. The dura was then treated like the sac of hernia. The constricted part, close to the gap in the bones, was pierced by a needle, carrying a double thread and was securelyligated.

I am satisfied that the cord and nerves when present should not be disturbed. If the dura is intact the above treatment is indicated, but when it is absent, I should clip through the arachnoid on each side beyond the cord and nerves, replace the latter structures in the groove, and, after detaching the superfluous membrane on each side, stitch the edges together over the nerve elements, as nearly water tight as possible.

I wish to offer two more suggestions, one in regard to shortening the time required to dissect out the sac, and the second in regard to combatting the loss of tension from escape of cerebro-spinal fluid.

Note the following points.—The sack is formed by the protruded spinal membranes. The tumor is the whole mass above the level of the skin. There is always plenty of loose connective tissue between the neck of the sac and the skin up to, and sometimes a little beyond the level of the base of the tumor, so that, if one could begin at the neck, it could be easy to dissect, with speed, up to the point at which the skin is adherent,

Again, if the dura is present, not only will time be saved by leaving it where it is adherent to the skin, but it will strengthen the flap.

Begin the operation by introducing, a small needle and fine silk, a purse string suture, on the side of the tumor, as far from the base as the skin is heathy. Pass the suture through the skin only, enclosing a space about the size of a thumbnail. Within this space dissect into the sac wall to ascertain the presence or absence of the dura. If it is present it will be easy to get between it and the arachnoid without entering the cavity of the sac. Pass a grooved director under the dura and, cutting on it, carry an incision completely around the tumor, through the skin and dura.

With the finger separate the dura and the arachnoid down to the neck of the sac. Then, in the middle line of the back, make a short longitudinal incision. Begin this an inch or less above the tumor and carry it down on to the same as far as the skin is thick. Through this incision, carry the finger or a blunt instrument, down to the neck of the sac and rapidly dissect, on each side of it, up to where the skin is adherent to the dura. Along the line of this adhesion, cut the dura with the scissors, as fast as the dissection is brought up to it. on each side, leaving the adherent dura to strengthen the flap. In cases in which the dura is absent, the search inside the purse string suture will end in puncture of the sac, but

no harm will be done and information will be gained. Tie the purse string quickly to stop leakage until the sac is isolated. The width of the flaps must, in this instance, be sacrificed to time. Make the same median incision described above. A finger in this incision will discover, instantly, the plane which the skin becomes adherent. On this plane make an elliptical incision around the tumor. Through the median cut go down to the neck and dissect up to the elliptical incision all around. I feel that it would be no exaggeration to say that either plan would, in many cases, reduce the time of the dissection seventy-five per cent.

That which is the greatest menace to our efforts at cure of spina bifida, by the operation, is the removal of tension incident to the loss of cerebro-spinal fluid.

It was the chief cause of the prolonged shock to which the little one I operated upon succumbed five hours after leaving the table. She aroused from chloroform in a short while. By the use of stimulents, and surrounding her with hot water bags, the surface became comfortably warm and the pulse improved, but the nervous system, or at least, the brain, never really reacted. Her mother failed to attracted her attention. Flicking the finger before the wide open eyes caused no reflex. More significant still, there was retraction of the head and, at intervals from the time she aroused from the anesthetic until death, there was that characteristic meningeal cry which we dread to hear, in exhausting ileo-colitis, announcing intracranial complication. Park and others advise lowering the head when the sac is opened. Reid, in his case, aspirated the tumor on several successive days before the operation, thus relieving the tension gradually.

Both these procedures I heartily endorse. I would have tried Reid's plan, could I have gotten the case in the hospital several days ahead.

Whenever practicable, ligating the pedicle of the sac is preferable to closing it by sutures; first, because there would be less rist of leakage; secondly, because it favors carrying out the plan I will now suggest for restoring the intraspinal and intracranial tension. Of course, the sac should be dealt with as rapidly as possible, in order to avoid waste of fluid. Then to restore pressure, inject with a small glass syringe, a few drachms of warm normal salt solution into the cavity of the stump, as it is being closed. Put the nozzle of the syringe through the loop of the ligature or the last suture, as the case may be. Inject the solution slowly, palpating the stump, the while, to estimate the tension produced, and when the desired amount is introduced withdraw the syringe carefully, tightening the loop of the ligature at the same time to prevent the escape of fluid.

BIBLIOGRAPHY.

1. International Medical Annual, 1893.
2. " " " 1894.
3. " " " 1901.
4. " " " 1900.

Gastrotomy and Retrograde Dilatation in Impermeable Benign Traumatic Stricture of the Esophagus and Internal Esophogotomy by the Abbe Saw-String Method.*

By Hugh M. Taylor, M.D., Richmond, Va., Professor of Practice of Surgery and Clinical Surgery, University College of Medicine, Richmond, Va., Surgeon to Virginia, Hospital, Etc., Ect.

Two years ago this little patient drank concentrated lye. In spite of persistent efforts to prevent it, a progressive stenosis of the esophagus with the usual symptoms and consequences, resulted. For six or eight months prior to the time at which he came under my care, he had had the intelligent services of Dr. John Dunn, and since the date of his accident he had been under the treatment of one or more good physicians.

For months Dr. Dunn had tried to stretch the stricture with bougies through the mouth. Finally, if not from the first, Dr. Dunn realized that the stricture was impermeable and did not belong to the class of cases which can uniformly be treated by direct dilatation. In spite of rectal alemeatation which was begun early to supplement what little possibly passed through the narrowed esophagus, the child lost flesh and strength rapidly. At the time of his admission into the Virginia Hospital apparently every drop of fluid taken by the mouth was promptly regurgitated from the dilated esophagus. A more piteable looking little creature is rarely seen—a child of six years of age, weighed but sixteen pounds, and his sufferings from hunger and thirst were distressing.

A gastrostomy, with the dual mission of an internal esophogotomy and retrogade dilatation and feeding through the gastric fistula was thought clearly indicated. By measuring with a bougie passed down to the stricture, its site was shown to be in the

*Read at the recent meeting of the Southern Surgical and Gynecological Association.

lower part of the esophagus. It was evidently below the arch of the aorta and this rendered an external esophogotomy impracticable. Mayo and Gussenbauer have both recently urged the advantages of external esophogomy for dense strictures above the arch of the aorta, but unfortunately, as in this case, a majority of dense strictures are low in the esophagus.

The poor little starving creature was in a sad plight to stand the anesthetic and the prolonged surgical intervention. Several times during the operation it was thought he would not live until its completion.

Upon opening the abdomen and stomach we found we were able to dilate the cardiac orifice of the esophagus sufficiently to introduce one finger, but about an inch above the orifice the esophagal tube seemed to be obliterated. A stout, pointed whalebone bougie passed down from above seemed at least an inch from the finger in the esophagus below. Apparently the tube was obliterated for an inch. Neither from above or below could the smallest bougie or probe be passed, and, of course, no dilatation direct or retrogated could be accomplished. After persistent gentle efforts it was determined to make an opening through the obliterated portion of the tube by force. Accordingly a whalebone bougie was shoved through from above and guided by the finger below, it was safely made to emerge into the stomach and out through the abdominal incision. To the end of the bougie a stout piece of silk was secured and easily drawn through the mouth with the bougie. An effort was then made to saw the stretched cicatrical tissue with the silk. Apparently we did not at first succeed with it as well as we anticipated. Several effords or repitions of the sawing were necessary before a satisfactorily large bougie could be passed. Finally, partly as a result of the sawing and equally as much by using a dangerous amount of force in passing bougies, the tract was sufficiently opened.

We did not as is advised by some, do an external esophogotomy, through which to bring the proximal end of the string. The weakened condition of the boy did not warrant that much added trauma even if such a procedure afforded decided advantages in the sawing movements. It was deemed wisest in this case to perform a gastrostomy. We were by no means sure that we would not need the gastric opening for future retrograde dilation, and certainly in his depressed condition, the boy needed this new route for the introduction of food. This last condition is duly impressed by Bryan (Operative Surgery, Vol. II. page 604) in the following words:

"The enfeebled condition of many of the patients with esophagal stricture, from lack of nourishment and the tendency of obstinate strictures to relax after a longer or shorter quiesence of the tube have led to increased frequency of employment of the latter (gastrostomy) in order to permit of ample and immediate nutritution and to afford the rest to the œsophagus essential to stricture relaxation."

It would naturally occur, if we have the stricture open sufficiently to introduce a bougie from above, it should be the case that we could introduce certainly, fluid food in which event a gastrotomy followed by an immediate gastrorrhaphy was all that was needed. We had the experience to guide us, that Dr. Dunn in spite of his best efforts, had failed to keep the stricture patent.

The esophagus above the stricture was very greatly dilated, very irritable and inflamed, and the number of false passages existing, of course we could not know, and as we have mentioned, it is impressed that the rest to this infiamed area, secured through the means of a gastrostomy, induces a marked lessening of the irritation and inflammation and naturally renders the passage of food and dilating instruments very much less difficult. It was also deemed advisable to leave the silk thread in site, certainly for a time. One end was brought out of the mouth and fastened by a bit of adhesive plaster to the cheek and the other secured in the same way outside the gastric fistula. Our idea in leaving the silk was to use it again if needed, to saw the stricture, or possibly to guide dilating instrument through the stricture, either from above direct or from below (retrograde). In view of the fact that we expected to have to use the gastric fistula as a route to reach and stretch the stricture, it was deemed best to have a straight tract through the abdominal wall. Obviously the Ssabana Jew, Frank, nor the Wilzel method would secure this desideratum.

The method adopted was that relied upon by Dr. E. J. Senn "the basis of action of this method is the formation from the walls of the stomach of a circular valve-like structure near the surface, which readily permits of the introduction of food, yet aims to prevent the escape of fluid at all times." The great advantages incident to Ssabana jew, Frank, and Witzel method were well illustrated in the after treatment of this case.

Leaking was incessant. Food as fast as it was introduced into the stomach, either through the mouth or the gastric fistula, was at once pumped back through the fis-

tula by the action of the diaphragm. The bad effects of a direct attachment of the stomach wall to the abdominal wall were very noticeable. The child was starving almost as surely with tow openings into the stomach as was the case when he had one. This was the case in spite of the fact that the opening into the stomach had been as high as possible on its anterior wall. Advice was finally secured which was very satisfactory in preventing leaking. It was an elastic rubber infant umbilical hernia truss. An elastic bulb which could be distendended with air or water made efficient pressure over the orifice of the gastric fistula with the purpose of giving the esophagus rest. It was then found that he could swallow fluid food readily and a good sized bougie was passed with but little difficulty. From this time on his convalescence was uninterrupted.

In the space of several months he has gained in weight from sixteen pounds. The truss has been worn over the fistula constantly and a few weeks ago it was seen that it had healed spontaneously. Dr. Dunn is kind enough to continue to look after the dilation. Deglutition seems not to be interferred with to any appreciable extent and solids as well as fluids pass readily. At times bougies are passed with ease, then again a spasm is very noticeable and calls for some patience before the attempt is successful.

A concise and logical summary of the treatment of this type of esophagal strictures has recently been formulated by Mayo (American Year-Book of Medicine and Surgery 1901).

(1) "Systematic sounding should be commenced in from two to four weeks after the swallowing a caustic substance. (2) Should the traumatism be severe, immediately gastrostomy will lessen infection and hasten cicatrization, sounding being carried on as before. (3) Non-dilatable strictures in the vicinity of the cricoid cartilage should be divided by external esophogotomy. (4) Stricture above the arch of the aorta may be safely cut by a combined internal and external esophagotomy. (5) Dense thoracic strictures are best dilated by Oschner's method and if necessary divided by Abbe's string-saw. (6) Impassable strictures should be treated by retrograde dilatation. (7) A dilated stricture should be occasionally sounded for years if not for life.

Tillman also advises gastrostomy for feeding purposes in the primary stages, obviously to lessen irritation and ulceration, to hsten cicatrization and to minimize inanitition. After my experience with this case, I would like emphasize an idea which has been so often impressed and that is that operative intervention such cases is too often delayed until the patient is in no condition to stand it.

Cerebro Spinal Fever with Report of Some Cases.

By J. S. Greenlea, M.D., Assistant Surgeon S. A. L. R'y, Ulmeres, S. C.

This seems to be a subject which has been neglected somewhat in the past few years. Osler gives the most elaborate discussion of any text-book upon this subject. There was not any history of any operation in ten cases and in one case there had been an operation performed on the eye-ball for the removal of a cinder.

Case No. I. H. S. G., Female, age 6 years; first complained of fever and headache; was first attacked on Saturday, P. M., with very slight symptoms of fever and on Sunday A. M., was taken with convulsions lasting for about 30 minutes and sinking into a dull coma lasting until about 12 or 1 o'clock, followed by death at about 1 or 1:30 P. M.; no *post-mortem* examination was made, pulse from 120 to 140; temperature from 103 4-10 to 108 3 4 before death and several contractions of spinal cord.

Case No. II. H. R. Was called to see the patient in consultation with a noted physician; found patient suffering with severe pains along spinal column and some severe pain whenever moved; the attending physician said patient was about 3 years old, and there was severe pain on examining the spine, and there was also some facial paralysis on the right side of the face and after the 13th day there seemed to be no pain only by a convulsion occasionally lasting only a few minutes, and the patient become a maniac; about two hours before death occurred pulse ranged from 110 130 and temperature from 96 to 108 F.

Case No. III. Female, age 9 years; first called on Thursday to see patient, who complained for several hours of severe pains along the spinal column and the back of the head; on first visit temperature was 103 and pulse 100 strong, with some nausea and vomiting, and the second visit temperature was 104 3-10 and pulse 105; ordered sulph. codin gr. 1-4 every 4 hours with phenacetin grain jss, every three and-a-half hours; third visit temperature was 100 2-10 and pulse 92 with slight headache and very nervous. I also prescribed chloral hydrate by enema every 6

hours. The patient seemed to improve until Monday A. M., when some pain was complained of in the spinal column and headache set in. In the course of a few hours there was severe coma, from which the patient died on Monday at 11:30 A. M.

Case IV. On first visit found the patient suffering from convulsions which had lasted for nearly an hour before my arrival. I prescribed codeine sulph. gr. 1-2 with bromide potash 30 grs. to the oz. i ℥j every hour until convulsions ceased and cold pack; temperature on arrival was 106 2-10, pulse 132; saw the patient again at 6 P. M.; temperature 107 3-10, pulse 140 and deep coma, from which patient died at 6:30 the next morning.

Case No. V. First visit at 6:30 A. M.; temperature 100 1-2, pulse 86; history age, 11 years; first suffered from a severe attack of pneumonia three years previous, and from this time until the present attack was apparently healthy; complained of fever on August 10th and some headache; temperature 97 3-100, pulse 70. First visit used strychnia sulph. gr. 1-20 every 6 hours, quinine sulph. gr. iij every 3 1-2 hours, chloral hydrate 30 grs. every 6 1-2 hours; patient's temperature on August 11 was 98 6-10, pulse 74 with normal heart; continued the treatment for 9 days when the patient was ordered to the sea coast, and in 3 weeks was as strong as before, except slight facial paralysis.

Cast VI. Called in to see a male, 11 years old, on September 26, with severe pain in lower extremities and ordered chloral hydrate gr. 30 every two hours until the pain was relieved and sleep produced; never saw patient again until September 30th, when there was an entire paralysis of the lower extremities.

Treatment: I have always used codeine sulph. and chloral dydrate in connection in these cases, but have found the most cases too far advanced when first called for medical treatment according to the severity of the attacks.

I have been unable to render much service from a medical standpoint, and I will state further that these little patients seem to suffer a great deal before ever complaining of the illness to their parents, which, in most cases, allow to linger for several days before ever calling in a physician. The prognosis in these cases are carefully guarded.

Puerperal Eclampsia---Report of Case.

By G. A. Davis, M.D.

Once and only once in 1,000 cases of childbirth have I met with this, the doctor's terror. This was in a Primipara. I was not called to see her until she was in labor; found her cheerful, bowels had moved well just prior to my arriving at the house. She was a short, heavy woman; her feet, hands and face were somewhat puffed. Every thing progressed as nicely as could be expected until the head was well down and the occipat presenting through the vulva, when, without the least warning, she remarked, "Doctor, I feel funny," and off she went into a spasm that lasted about 20 minutes. I was giving her chloroform at the time, but only in small quantities. I at once gave charge of chloroform to the nurse and told her to push it. I opened a vein in her arm and took 1 to 1½ pints of blood, by which time the spasm was off. I had the chloroform continued and as soon as I could sterilize my forceps delivered the child, a well-formed, medium-sized, living girl. I then waited half an hour and delivered the secundines, in the meantime having given her 1 dram of F. E. Ergot. Everything then seemed all right, uterus well contracted, discharge as it should be, the child dressed and placed to the breast, this being about two hours after the birth of the child. I examined her uterus through abdomen and found it well contracted. I concluded to go home as I had been up all the night, this being about 11 a. m. I got all things together and turned to tell my patient good-bye, when she remarked, "I feel strange," and off again with a spasm, at the same time with each jerk I could hear a gush of blood. As quick as I could get ready I introduced my right hand up into her uterus and put my left over the fundus on abdomen. I removed all clots but found no membranes. By this time her uterus was well contracted and the spasm off. I again gave a dose of ergot and morphia. After two hours everything being all o. k., I left. She made an uneventful recovery. In about two years she sent me word that she was seven months, and I called to see her; face, hands and feet swollen and she was very nervous. I put her on tr. nucis vomicæ, pot. chlorate and cream of tartar; second child came all o. k., and not the least trouble. She moved away and I heard that about two months ago she gave birth to a child and some two or three hours after the birth she had spasms and came near dying. The physician who attended her had not seen her prior to the day of labor.

When a child on being moved shaws a tendency to cough, and appears to be sore and uneasy, it should receive bryonia.

Special Insurance for Total Abstainers.

In answer to a numerously signed petition, the Equitable Life Insurance Society of New York has agreed to put in a special class any successful applicant for insurance who declares that he has been a total abstainer from the use as a beverage of alcoholic liquors, including wine, beer, and fermented cider, and as a conditian of membership in this class to remain a total abstainer as long as his policy is in force. Any surplus apportioned to the policy will be based on the experience of the socity on policies belonging to the total abstinence class. It is believed by the pertitioners that the number of the total abstinence class will receive the benefit of largely increased dividends. A number of British life insurance companies have for many years segregated their total abstinence policy-holders.—*Journal of Inibriety.*

A consular report illustrates what has already been accomplished in Italy in allaying the ravages of malaria there. The Mediterranean Railway Company has equipped all stations and employees' houses in malarial districts with mosquito-proof screens, and those who are obliged to be out after nightfall are provided with mosquito-proof clothing. By this means the railway company has secured complete immunity for its servants and their families, even in the worst loaclities, as Battipaglia and San Nicola. Formeriy an appointment to these districts meant little less than a death sentence, and no man could hope to have his family with him. The families have been perfectly healthy in these protected houses.

Max Nassauer asserts that an incipient cold in the head, with all its unpleasant sequelæ, can be checked every time, in the first hour or so, if the nose is thoroughly rinsed out with a weak solutiou of potassium permanganate, which seems to have a specific action upon the germs causing the trouble.

Rapid Restoration of the Functions of a Divided Ulnar Nerve after Suture.

Toussaint (Rev. Med. de l'Est.) reports an interesting case in which suture of an ulnar nerve that had been accidentally divided two years previously was almost immediately followed by restoration of move ment and sensation in the corresponding hand. The patient was a French soldier, aged 23, who, in November of 1898, was severely wounded just above the left wrist in thrusting his forearm through a pane of glass. This injury was followed by distortion of the left hand, with loss of sensibility of the last two fingers, and also by severe pain extending along the course of the ulnar nerve. When the man came under the author's notice at the end of last year, it was found that tactile and thermic sensibility, together with feeling pressure, had completely disappeared over the digital distribution of the injured nerve. The muscles of the hand supplied by this nerve were paralysed. The first palmar interosseous muscle had lost all apparent contractility even under the influence of the electric current, and the ring and little fingers were bent on to the palm. Voluntary apposition and separation of the fingers were, the author states, reduced to their most simple expression. Trophic disturbances were indicated by the absence of hairs over these fingers, by longitudinal furrowing of the nails, and by the soft and glossy skin. On December 21st the author exposed the separated ends of the ulnar nerve, and fixed the end by catgut sutures passed through each segment of the nerve trunk. On the following day the patient complained of pain in the last two fingers, and stated that he could move the little finger. On December 24th the dressings were removed, and then it was found that voluntary movement of these fingers had been removed, together with cutaneous sensibility, both to the contact of external bodies and to heat and cold. This case, taken together with two well-known instances reported by Tillaux of rapid restoration of nerve function after secondary suture of the median, furnishes an encouraging, though very exceptional, example of nerve suture. The good results in the author's case are attributed to the care taken to approximate the ends of the divided ulmar, and to keep those ends together by sutures passed through the whole thickness of the nerve.—*British Medical Journal.*

In making application to the throat do not have your applications "dripping" wet with the remedy. Sometimes some of the medicine drops into the larynx and the coughing defeats your efforts.

Dr Albert C. Barnes, of the University of Pennsylvania, who was employed by the Board of Health of Camden, N. J., to investigate the aecent deaths in that city from lockjaw followihg vaccination, declares that it has been proved conclusively that the vaccine used was not responsible for the developed of tetanus. A bacteriological examination of the virus used failed to reveal any trace of tetanus germs, and experiments made on lower animals yielded negative refults.

THE

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SUBSCRIPTION. $2-50 PER YEAR,

MEMBERSHIP IN THE AMERICAN MEDICAL ASSOCIATION.

In the work of the organization of the medical profession throughout the United States, which is demanding and engaging the efforts of the leaders in the profession and the executive bodies of the different medical organizations in the States, the individual enrollment is a very important matter, toward the success of the work. We have urged repeatedly the importance of prompt organization of State and County Medical Societies when such are not already in active existance. Every regular physician in good standing should become a member of such societies.

In addition to this every practicing physician should also have membership in the American Medical Association. The annual fee of five dollars with endorsement of the officers of County or State Medical Society should be forwarded to Dr. Henry P. Newman, No. 100 Washington St., Chicago, Ill., this will secure the membership in the association. With this you secure the Journal of the American Medical Association, which should be received and read by every regular physician in the country; in fact every practitioner in regular medicine, This with the membership in the County Medical Society, which will in the reorganization underway carry membership in the State Society. At a small expense will place the medical man in entire touch with the scientific and legislative work of his profession in the United States.

Prof. W. W. Keen of Philadelphia, in the President's address at the meeting of the American Medical Association at Atlantic City in June 1900, said regarding the Journal of the American Medical Association. "But it is not only on the number of subscribers that the association is to be congratulated, but especially on the quality of the papers published in the journal. It is, however, not ohly idle words of vague praise that we should bestow on the trustees and the able editor of the journal, but we should recognize that never before in the history of the journal has it been so well conducted, its pages so filled with admirable articles and its influence for everything that makes for the best in medicine so potent as at present."

With the Journal of the Americal Medical Association and your local City or State journal at least if you can afford no others, you are well prepared to keep posted on the movements and achievments of the medical profession in the United States. The American Medical Association ought to number at least fifty thousand membership.

DISPENSARY PRACTICE.

One of the most flagrant evils which reflects and works harm against members of the medical profession, in cities especially, is that of free dispensary practice.

The methods persued have received severe criticism by the members of the profession and by the medical press generally, but still no remedy sufficient to abate the abuse has been devised up to the present time.

Strange to relate this evil is practiced in and by the very profession which it injures in its evil effect, more than any other.

Notwithstanding this criticism and the measures devised to abate the practice. Hospitals and dispensaries continue to treat patients well able to pay for their necessary professional service. It not only tends to pauperize the masses, but it is catling that cuts both ways. It robs the local members of the profession of that support which they ought to receive from people well able to pay. It robs the hospitals of that legitimate income which they should receive in honest fees from their patients able to pay for their care, which should be applied towards its daily usefulness. Besides it frequently crowds the clinics and prevents that thorough and full study of cases which should prevail to the benefit of both the patient and student or interne who might be present to gain that information which the case would afford.

It is an injustice to the patient who should have the careful examination that the diagnosis and line of treatment may be most accurately decided upon.

Many methods and plans have been devised to over-come this wrong, but invariably the execution of any such methods have ended in failure.

New York City endeavored to control the evil two years ago, but it was practically a failure from the inability to carry the methods into effect by the impossibility to follow up each patient to ascertain the ability of the patient to pay.

At the meeting of the Medical Society of Pennsylvania in Philadelphia in September last the Committee on Pharmacy reported and recommended a plan that is new and promises, if carried into effect, to go a long ways toward reform in this matter. The plan proposed is to require all persons asking or securing free service, to record their names, if unable to write to make their mark. This measure to be successfully carried out, each hospital must be under the sepervision of persons authorized to investigate cases, and appointed for that purpose.

It is believed, where this plan has been commented upon, that if it can be adopted throughout the country, there is strong probability that it would bring about a general improvement in the practice.

A few hospitals or a single state cannot successfully cope with the reform. If this plan presented by the medical society of Pennsylvania proves successful, it ought to be adopted throughout the Union,

Why should those who are able to pay for their medical care be allowed and even encouraged to dodge this duty through a free disdensary. If the profession make it agreeable and convenient for such people to take advantage of this dodge method, there is no blame on the part of those accepting the service, but the principal fault lies in our propagating and continuing a practice which reverts to our own undoing.

MEDICAL FEES.

This is a subject that is a pertinent one for the consideration of every physician, be he one who depends entirely upon the income from his professional work for his living and financial well-being; and even is it important to him who is well endowed financially to spend his days in the study in the great field of medical science for the love of the laws of life and disease. The one must have that for which he renders honest service so that he may provide himself with the necessary requisites for his every-day professional work, besides the requirements and needs of himself and those who depend upon him for daily support and for the necessary relief to himself in the exhausting toils of his professional career during work and rest. The other, who is more independent and well able otherwise to provide for himself, he too should receive the reward for his labor, because he has devoted his strength and has conferred the blessing of his knowledge, judgment and skill upon the individual needing the service.

Why should the medical man be indifferent or neglectful of the reward for which he toils, for which he spends his strength? Are his dues any less honorable or just, or is he less deserving of reward than other laborers in any field whatever of human usefulness? Is there a matter more important to any one than the welfare and usefulness of his physical being, life and limb?

The propriety and importance of a just reward for honest labor admitted, the question presents: "How shall the charge or fees be regulated? That is a matter which the profession must decide in every section. The fees or charges should not be made a burden or hardship, but can be regulated accordingly. In some sections there exist such prosperity that all are able to pay good round fees, while other sections are able to pay moderate fees only; and yet the fees might correspond largely over the whole country. There always exists the worthy poor, whom all physicians are ready to bestow the needed charity, all others should be compelled to pay a fee commensurate with the service rendered. Nor should a minimum fee become the customary charge for service. A more nearly maximum or higher fee should be asked and collected whenever it is proper with the individual and service. There are few people so poor but who will be ready to spend their means for pleasure and in satisfying vicious habits without thinking it extravagant. Then why not compell them if needs be to pay for that which has been a most essential good at a critical time.

Dr. P. Maxwell Foshay, of Cleveland, Ohio, at the meeting of the American Academy of Medicine in June, 1901, thinks "There is every reason in the world for the general practitioner to proportion his charges in all cases to the value of the service rendered and the ability of his patient to pay.

The entire profession should procede in this matter in a concerted form.

Let each individual physician pursue this course and the profession of our country will be better in every way by it, and the lay populace will be benefitted and will have come nearer rendering a proper regard to deserving labor.

The vexed question of divided fees will be solved at the same time by this evolution in medical fees. As Dr. Foshay further says: "No present retrogressive tendency in the evolution of the medical profession is at present so strong as this of the

physician dividing fees behind the patient's back."

Let each member of the profession make his charges as any other person who has rendered a service in the discharge of his duty commensurate with the value of that service, and the medical man will not leave his family in destitute circumstances as it often is when he dies.

A CROWDED PROFESSION---A REMEDY.

For some years past the medical profession and the medical press has recognized the rapidly increasing number of physicians in the United States. The lay press has also discussed the matter. The increase has been beyond the needs of the country, and beyond the percentage of increase of the population. The ratio in the United States is now one physician to every 555 people. While some States are less supplied, other States have a smaller ratio per physician. The profession has become so crowded that the necessity for subsistence with the ambition to have practice has created a disposition toward rivalry and competion, leading to illigitimate measures to gain clients. All sorts of methods, schemes and practices with a possible show of ethical intention on the surface with but a loose form of political wire-pulling to attract attention is growing too frequent. The competition has become so great that questionable methods in so many ways are practiced to curry favor and to hold and gain clients, such as *Low Charges, Examinations without Charge, Minimum Fee and Medicine Free.* Lodge connections, appointments to political and other institutions, mainly for the conspicuous attention it will give.

This should not go on indefinitely; effort and methods should be put fourth that will tend to gradually overcome this tendency which has no gain in it for the people, nor safety in morals to the medical guild. There should be a supply of medical practitioners sufficient for the proper medical welfare of every community, that each individual when needing medical service may receive that careful and exact attention which his condition calls for, even in epidemics; not only for the benefit of the patient directly but also for the welfare of the practitioner in the professional management and success of the case. The number graduating each year from medical schools ought to be reduced by suppression through the selective system of allowing only ably-fitted men to enter the schools; persons whose previous qualifications and natural adaptability show their fitness for the work; for medical and scientific accomplishments, those only who have shown a natural ability for the work.

The work lies wholly with the profession. Nearly every would-be medical student appeals at some time to some physician for his advice as to whether he may become a doctor. Let the physician so consulted consider seriously and gravely the individuality of the applicant, his ability and qualifications for the work. If the mental, physical, moral and other natural qualifications are present and a reasonable assurance of financial strength to go through the regular medical course, let him so decide and advise.

An editorial in American Medicine for October 26, 1901, on "The Advantages and Disadvantages of the Profession of Medicine," says "Mistake in the choice of a calling may lead to lifelong regret, to failure and even to social and moral shipwreck. Therefore such a step should not be taken without full consideration of all that the profession has to offer, and the demands it makes upon those who practice it."

Regarding the "Qualifications and Characteristics desirable in the Practitioner of Medicine," an editorial in the same Journal, quoting from The London Lancet, says: "Apart from the mental training which is obtained by a higher education a general knowledge much above the level of the common people is important for professional men, and the man who enters upon his professional studies insufficiently equipped in general knowledge encounters difficulties at every step which may be surmounted only at a woeful waste of zeal and energy." Besides it is important for "early instruction in the natural sciences, for their training for the power of observation; an absolute need of acuracy, and a sympathetic nature. A medical man must be a sympathetic friend as well as a scientific adviser. Bodily strength is also needed."

If he does not find a definite assurance of all this, let the advice be adverse. Let him point the advantages offered by other callings, and a possibly more useful and successful avocation with which he might be better adapted.

The college should be more exacting in the examination and requirements for entrance on the course of medicine. How many young men taking the examination for entrance on the medical schools are rejected? Too frequenty the ability to sign his name to the register and pay the matriculation and college fee is usually the *open sessame* to the medical course. Even if he does get scratched by the State Examining Board, after he has his diploma.

Let a measure be inaugurated as it is sug-

gested in The Journal of the American Medical Association for Sept. 21, 1901, which says: "The control of entrance examinations must be put out of the hands of the medical college faculties, which should be delivered from the temptation of augmenting their student lists. There should be in each State a non-political authority, independent of the colleges, to regulate the requirements for admission to the medical course as well as to the medical practice." "This is already the rule in some States. Until this system is universally and efficiently applied, we still have much that should not be."

Let the House of Delegates of the American Medical Association urge this matter upon the profession of all of the States where such is not already in force.

THE MANAGEMENT OF OPHTHALMIA NEONATORUM,

A recent writer who holds a teaching position in a prominent college has advocated a waiting course in ophthalmia neonatorum, and after acknowledging the efficiency of Crede's application of 1% silver solution to the eyes of the new-born in preventing the disease, he says: "Silver must not be applied too early before free discharge is established; *nor at any stage while the lids are tense and the conjunctival surface covered with a grey film.*" (Italics mine).

Nothing can be farther from correct teaching, for, if the inflammation is catarrhal, a 20-gr. solution in the start will arrest it, while, if it is gonorrhœal, it will greatly and favorably modify the course of the case.

Now for the second proposition, that the silver is not to be used while the lids are tense or covered with a grey film.

Years of experience has taught the writer just the contrary, and of all times this is when silver is needed to kill the cocci and remove the element of greatest danger, the grey film, which is a culture-bed swarming with germs and crowded by the tense lid onto the cornea ready to invade it at the first break in continuity in the corneal epithelium.

No half-way measures will suffice, and so far as possible all pus and the grey membrane lining of the lids must be removed to give access to the gono-cocci imbedded in the living tissue.

The method of application is of the greatest importance and should be as follows: After first removing all accessible pus from outside, gently evert the lids by pressure near the orbitae margin and wipe between the eyes with narrow pledgets of absorbent cotton dipped in a saturated boracic acid solution and pressed between the thumb and fingers. Carefully avoid touching the cornea, but float the pus to the top by dripping boracic acid between the lids. The child must be at full length on the nurse's lap with the head on a towel between the knees of the physician, in which position it is controllable, for the little things early learn to squirm out of reach.

Never syringe or irrigate unless you have a few eyes to spare, for many an attendant has lost an eye from the spattering of pus by this method of cleansing.

Next drop a 4-per-cent. solution of cocaine into the eyes which will facilitate farther handling and diminish the subsequent crying and consequent swelling of the lids.

Twist a pledget of absorbent cotton tightly on a toothpick so that it does not exceed one-eighth inch in diameter, saturate the cotton in silver nitrate solution, forty grains to the ounce; lay it against a dry pledget to absorb excess so that the solution will not flow when pressed on the conjunctiva.

Raise the upper lid by pressure over the retro-tarsal fold close under the orbital margin and with a rolling motion insert the probe to the bottom of the cul-de-sac sweeping it with the same rolling motion from the inner canthus over the entire inner surface of both lids emerging again at the inner canthus.

The lids must be lifted during this procedure so that the cornea is not injured by the probe. Done in this manner every fold of the conjunctiva is reached by the silver, without which disinfection of the conjunctival sac is impossible.

Excessive action may be checked by a salt solution dropped between the lids, but this is unnecessary if all the steps of the application have been carried out as above outlined.

A 10-grain to the ounce iodoform ointment in white vaseline may be placed between the lids and cold compresses of boracic acid solution laid outside. The nurse must cleanse the eyes by dripping boracic acid solution into them every fifteen minutes so long as pus forms in any considerable amount, and this must be insisted upon as the most necessary part of the home treatment. Cases have recovered when this was not done, but it is the only safe plan.

On the second day, if there is improvement, the silver may be used of half the strength and as improvement goes on 10-grain solutions may suffice, but should re-

lapse occur, as sometimes happens, return should be made to the strong applications.

When pus ceases to be formed and the discharge becomes muco-purulent and is found only outside on the lids protargol, 20 grains to the ounce, may be dropped into the eyes for a few days and applications to the lids discontinued.

If the above outlined plan is closely followed it will be very rare that scarring of the cornea will occur, while the loss of an eye will be so rare as to be a curiosity.

BOOK REVIEWS.

An American Text-Book of Pathology. Edited by Ludvig Hektoen, M.D., Professor of Pathology, Rush Medical College, Chicago; and David Riesman, M. D., Professor of Clinical Medicine, Philadelphia Polyclinic. Handsome imperial octavo of 1245 pages, 443 illustrations, 66 of them in colars. Philadelphia and London: W. B. Saunders & Co., 1901. Cloth, $7.50; Sheep or Half Morocco, $8.50 net.

The importance of the part taken by the science of pathology in the recent wonderful advances in practical medicine is now generally recognized. It is universally conceded that he who would be a good diagnostician and therapist must understand disease—must know pathology. The present work is the most representative treatise on the subject that has appeared in English. It furnishes practitioners and students with a comprehensive text-book on the essential principles and facts in General Pathology and Pathologic Anatomy, with especial emphasis on the relations of the latter to practical medicine. Each section is treated by a specialist who is thoroughly familiar with his particular subject, and can best frame the theories and conclusions in an authoritative form. The illustrations, which are nearly all original, and of which 66 are in colors, are unsurpassed in beauty by those in any similar work in the English language. In fact, the pictorial feature of the work forms a complete atlas of pathologic anatomy and histology.

Hypnotism. A Complete System of Method, Application and Use, Prepared for the Self-Instruction of the Medical Profession, By L. W. De Laurence, Instructor at the School of Hypnotism and Suggestive Therapeutics, Pittsburg. Chicago: The Henneberry Co., 415 Dearborn street, 1901. Port. Front, 256 pp., 17 pl., 8vo. Price: Cloth, $1.50.

This is the second edition of this work on hypnotism. The present edition is very much enlarged and contains additional chapters on the medical psycology of hypnotism and mesmerism, treatment by suggestion, the origin and cause of disease, the mental characteristics of man, and the possibilities of the dormant powers or latent forces within him. The author wishes the fact to be known that the advocacy of hypnotism or suggestive therapeutics is not a universal remedy or one to supplant regular medical treatment, but an aid in combating many forms of the so-called "neuroses" and other nervous affections. The make up of the book is very satisfactory.

Atlas and Epitome of Bacteriology. A text-book of Special Bacteriologic Diagnosis. By Professor Dr. K. B. Lehmann, Director of the Hygenic Institute in Wurzburg. From the Second Enlarged and Revised German Edition. Edited by George H. Weaver, M.D., Assistant Professor of Pathology, Rush Medical College, Chicago. In two volumes. Part I., consisting of 632 colored figures on 69 lithogrphic plates. Part II, consisting of 511 pages of text, illutrated. Philadelphia and London. W. B. Saunders & Co., 1901. Cloth, $5.00 net.

This work supplies a long-needed want in the field of bacteriology and bacteriologic diagnosis, and proves a most valuable addition to Saunders' Series of Hand-Atlases. As in all the volumes of this commedable series, the lithographic plates are accurate representations of the conditions as actually seen, and this well-selected collection, if anything, is more handsome and useful than any of its predecessors. As an aid in original investigation the value of the work is inestimable.

The text is divided into a general and a special part. The former furnishes a survey of the properties of bacteria, together with the causes of disease, disposition, and immunity, reference being constantly made to an appendix of bacteriologic technic. The special part gives, as far as possible in a natural botanical arrangement, a complete description of the important varieties, the less important ones being mentioned when worthy of notice. The causes of diptheria and tuberculosis, together with the relative varieties, have been especial attention.

Most praiseworthy is the reformative tendency in regard to the grouping of varieties of bacteria, the strict division of the system especially, the rational naming of the bacteria, etc. The system of nomenclature is entirely original with the authors and is deserving of the grestest commendation, particularly that of the fission-fuugi,

which has been handled in a most masterly manner.

As a text-book of bacteriology and bacteriologic diagnosis it is all that could be desired, embracing, as it does, in a comparatively limited space, all the important species and many of the less valuable ones, and discussing them in language concise and easily intelligible.

A Text-Book of Surgery. By Dr. Hermann Tillmanns, Professor in the University of Leipsic; Translated from the Seventh German Edition by Benjamin T. Tilton, M.D., and John Rodgers, M.D. Edited by Lewis A. Stimson, M.D. Vol. I. The Principles of Surgery and Surgical Pathology, with five hundred and sixteen illustrations. New York. D. Appleton & Co., 1901.

This work of nearly nine hundred pages contains not only a complete exposition of general surgical pathology and bacteriology, but also chapters on diseases and injuries of special tissue, with the treatment, tumors, general surgical technique, and bandaging. Heretofore, all that pertained to surgery was enclosed in one volume, and under one heading. Now, owing to the advance and progress made in this science, the subject is divided into separate volumes. This custom has been practiced by German and French writers for years and it is now the custom in English and American works. These works lay no claims to taking the places of the old original works on surgery. It is very necessary that our medical students should have text-books from which they can first gain a thorough knowledge of the principles of surgery before taking up surgical abscesses and injuries of special parts. The opening chapter in this work is devoted to the preparation for an aseptic operation, or the general principals governing surgical operations. The work is too large to review each chapter critically and in detail. All the subjects pertaining to surgery in the line of this volume have been very fully considered. The illustrations are numerous and excellent. The work is a handsome volume and inferior to none as a work on surgery.

Anatomy, Descriptive and Surgical. By Henry Gray, F.R.S., Lecturer on Anatomy at St. George's Hospital, London. Thoroughly revised American from the 15th English Edition. In one imperial octavo volume of 1246 pages, with 780 illustrations. Price, with illustrations in black, cloth, $5.50 net; leather $6.50 net. Price with illustrations in colors, cloth, $6.25 net; leather $7.25 net

Gray's Anatomy is as well known in the physician's home as theBible is in the Parson's house. This is the fifteenth edition of this excellent and standard work. It has been carefully revised and its revision interests every student of medicine. It is a perennial favorite and with good reason. Henry Gray was a born Anatomist and a born teacher. His methods of presenting anatomical knowledge in text and picture were such a conspicuous and rational advance in his first edition that it instantly won the foremost place, which has never since been disputed.

In this revision every page has been scrutinized and whole sections written, notably those on the Brain, Spinal Cord, Nervous System, and Viscera. The magnificent and unique series of illutrations has been enriched with 231 new engravings, and the use of colors has generally increased. This great work has thus been brought to date with lavish expenditure of labor and money. It is probably the cheapest of all products of the press, considering the fact that it contains the ripest anatomical knowlege of the world and presents it with an unequaled wealth of illustration.

Typhoid and Typhus Fevers. By Dr. H. Curschmann, of Leipzig. Edited, with addition, by William Osler, M.D., Professor of the Principles and Practice of Medicine, Johns Hopkins University. Handsome octavo of 646 pages, illustrated including a number of valuable temperature charts and two full-page colored plates. Philadelphia and London. W. B. Saunders & Co. 1901. Cloth, $5.00 net; Sheep or Half Morocco, $6.00 net.

The original German edition of the volume is universally recognized as the standard authority on the subjects of which it treats. The American edition, however, even surpasses the German, for, besides, containing all the material of the orginal, extensive additions have been made to almost every chapter, thus incorporating into the work the very latest views on the subjects under discussion.

The chapter on Bacteriology has been thoroughly revised and much new material added, giving prominent consideration to the distribution of the typhoid bacilli, especially in the urine, the nose-spots and the blood.

To the chapter on Pathology many minor additions have been made, incorporating the important work of Mallory. The literature on the localized lesions due to the bacillus has been carefully reviewed and made to conform to the most recent advances in that part of the subject. Thayer's exhaus-

tive study of the state of the blood has been utilized, and the Surgical Aspects of Typhoid Fever have been fully revised with the aid of Keen's monograph.

Much valuable material has been added to the chapter on Diagnosis by Bacteriologic Methods, partlcularly with reference to the recent work in blood-cultures and on the detection of bacilli in the urine.

The chapter on Perforation and Peritonitis has been practically rewritten, as has also the section on the Hepatic Complications of Typhoid.

Thus it will be seen that the American edition of this valuable work, while still possessing all the commendable qualities of the original German, is greatly enhanced in its field of usefulness by being brought strictly abreast of the latest literature on the subject, and by representative specialists.

Deformities. A Text-Book on Orthopedic Surgery. By Edward Farmun, M. D., Chicago, Medical Press Company.

This work comprises many subjects not ordinarily included in works on orthopedic surgery, and it includes almost all the deformities that are met with in general practice. The chapters that contain subjects that are of rare occurrence, and especially those in which treatment is of but little avail, are handled briefly, while those deformities of common occurrence are detailed at considerable length. The routine followed in writing of each deformity is as follows:

Definition, Synonyrus, Etiology, Morbid Anatomy or Pathology, Symptoms, Diagnosis, Prognosis aud Treatment.

Under treatment much consideration has been given to the prevention of deformities, as well as to their connection. Besides the matter usually contained in works on orthopedic surgery, the writer has given in detail a good description of congenital deformities, and at the close a fine and general consideration of hernia.

The writer has giuen us a text-book on orthopedic surgery which will not only be of assistance to the student but will be helpful to the practitioner as well. The illustrations in this work cannot be surpassed. It is a hamdsome volume beavtifully printed on clean white paper.

With the Titbetous in Tent and Temple. By Susie Carson Rynhart, M.D., Fleming H. Revell Company, Chicago, New York and Toronto.

In the following work the writer narrates briefly the events of four years' residence and travel among the Tibetans. The author describes the custome, beliefs and social conditions of the Tibetans in a very graphic and interesting manner. Concerning these people and their medical art, she writes:

For headache large sticking plasters are applied to the patient's head and forehead; for rheumatism, often a needle is buried in the skin or shoulder; a tooth is extracted by tying a rope to it and jerking it out, sometimes bringing out a part of the jaw at the same time; a sufferer with stomach ache may be subjected to a good pounding, or to the application of a piece of wick soaked in burning butter grease, or, if medicine is to be taken internally, it will consist probably of a piece of paper on which a prayer is written, rolled up in the form of a pellet, and, if this fails to produce the desired effect, another pellet is administered composed of the bones of some pious priest.

The book is handsomely gotten up, is well illustrated and contains a map showing the route of the last journey undertaken by D. Rynhart.

A Laboratory Handbook of Physiology Chemistry and Urine-examination. By Charles G. L. Wolf, M.D., Instructor in Physiologic Chemistry, Cornell University Medical College, New York. 12mo volume of 190 pages, fully illustrated. Philadeldhia and Landon: W. B. Saunders & Company, 1901. Cloth, $1.25 net.

The object of this book is to supply to students and practitioners of medicine a guide to a course in physiologic chemistry and the examination of the urine and the contents of the stomach. The first part of the book is taken up with simple exercises in physiologic chemistry, which will give an elementary insight into the chemical side of physiologic processes.

In the part of the book which deals with the urine and the gastric contents, no tests have been given which do not rest on a good chemical foundation. The aim has been to give as few tests as possible, and these to be chosen for their suitability to purely clinical needs. No operations are described which have not undergone a thorough trial with students in the laboratory.

Infant Feeding In its Relation to Health and Disease. By Louis Fischer, M.D., Second Edition. Philadelphia, F. A. Davis, Co., Publishers, 1901.

No subject before the medical profession is of more importance or diserve more careful consideration than that of infant feeding. There are probably more deaths in

infants from improper feeding than from any other known cause. The appreciation of this work is showd by a call for a second edition within six months. This edition has been carefully revised. A great many chapters have been changed; some have been added, including a new chapter on "Infaut-feeding in summer complaint."

A new diet for an older child, after weaning from the breast or bottle, has also heen added. The book is well printed and contains many handsome plates. The volume is to be highly commended.

A Text-Book of Pharmacology. Including Therapeutics, Materia Medica, Pharmacy, Prescription-Writing, Toxicology, etc. By Torald Sollmann, M. D., Assistant Professor of Pharmacology and Meteria Medica, Western Reserve University, Cleveland, Ohio. Royal octavo volume of 880 pages, fully illustrated. Philadelphia and London: W. B. Saunders & Company, 1901. Cloth, $3.75 net.

This work furnishes, in a manner suited for reference and study, a scientific discussion and definite conception of the action of drugs, as well as their derivation, composition, strength, and dose. The author bases the study of therapeutics on a systematic knowledge of the nature and properties of drugs, and thus brings out forcibly the intimate relation between pharmacology and practical medicine. Practitioners and students will find the work and admirable guide in that most important part of their equipment, namely, how to use drugs accurataly and efficiently. The book includes the practical subjects of materia medica, pharmacy, prescribing, incompatibility, toxicology, etc. A special chapter has been devoted to toxicologic analysis, including both the inorganic and organic poisons. Pharmaceutic assaying has likewisc been given donsideration. There is also a section on labatory experimentation, which, besides rendering the greats aid to the student in the laboratory, will serve as a basis for classroom demonstrations. The book will be of the utmost service, not alone to students and practitioners, but also to druggists and everyone interested in the use of medicines.

The Surgical Treatment of Disfigurements and Deformities of the Face. By John B. Roberts, A.M., M.D., second edition. Philadelphia. The Philidelphia Medical Publishing Co., 1901.

This little book of seventy-two pages contains much matter of great interest to physicians and surgeons- It is a subject that is not very well understood or practiced by physicians. The illustrations are many and are most excellent. Many disfigurements of the face are shown before and after operation. It is quite remarkable the results that are accomdlished by plastic surgery.

The little book is clearly printed and bound.

First Aid to the Injured and Sick. By F. J. Warwick, B. A.. M. B. Cantab, Associate of King's College, London; Surgeon-Captian, Volunteer Medical Staff Corps, London Companies, etc.; and A. C. Tunstall, M. D., F. R. C. S. Ed., Surgeon-Captian Commanding the East London Volunteer Brigade Bearer Company; Surgeon to the French Hospital and to the Children's Home Hospital; etc. 16mo volume of 232 pages and nearly 200 illustrations. Philadelphia and London; W. B. Saunders & Co., 1901. Cloth, $1.00 net.

This volume of practical information is intended as an aid in rendering immediate temporary assistance to a person suffering from an accident or sudden illness until the arrival of a physician.

The importance of first aid is indisputable as a life-saving expedient, for upon the promptness and efficiency of the aid first rendering the patient depends, in a great measure, the termination of the case.

The authors, fully appreciating the urgency of the subject, have succeeded in producing an admirable work of practical emergency procedures, and thay have couched it in such clear and unequivocal laungage that even those entirely unfarmiliar with the science may easily grasp the meaning intended.

It will be found a most useful book of ready aid, and of invaluable service not alone to nurses, railway employees, etc., but also to the laity in genercl, as a book of indispensible first aids.

Induction Coils: How to Make, Use, and Repair Them. Including Ruhmkorff, Tesla, and Medical Coils, Roentgen Radiography, Wireless Telegraphy, and Practical Information on Primary and Secondary Battery. By H. S. Norrie (Norman H. Schneider). Second Edition, Revised and much Enlarged. New York: Spon & Chamberlain, 12 Cortland St.

In this work the above subjects have been treated in a very masterly and practical manner. The work deals with large coils which are used mainly for X-ray work. This is the second edition and it has been

thoroughly revised, pratly rewritten and a great deal of new matter, with twenty-six new illustrations, added. The work is well illustrated and many of the illustrations are described in detail. It is a great work on physics and as such it cannot be surpassed. Every one using the coil in the X.ray should be in posession of this book.

Warwick of the Knobs. A story of Stringtown County, Kentucky. By John Uri Lloyd, Author of "Stringtown on the Pike," "Etidrohpa," "The Rright Side of the Car," etc. With Photographic Illustrations of Knob County. New York: Dodd, Mead & Co., Publishers. Price, $1.50.

The author of this work is well known from the popularity of "Stringtown on the Pike."

This story "Warwick of the Knobs" is very interesting and absorbing. The scene is laid in Kentucky during the civil war, and every page is full of life and action. Warwick, a hardshelled Babtist preacher, is the ruling figure. He is a relentless bigot, trampling on all human affections in his blind devotion to family pride and his adherence to the theological doctrine of predestination.

Transactions of the Medical Association of the State of Alabama, Selma, April, 16, 19, 1901.

This volume not only contains the minutes, various reports etc., of this association but many valuable monographs and articles upon different subjects. The message of President Cunningham is an interesting and valuable document. Other papers worthy of mention are those of William Grace Harrison; The Monitors address by Gray Palmer and many others. This association has a membership of 1,158 and is in a prosprous condition. The volume is will bound and printed and is a credetable addition to literature.

Transactions of the Association of American Physicians. Fifteenth Session, held at Washington, D. C. Vol. XV. Philadelphia. Printed for the Association.

The Transactions of the Association of American Physicians for 1901 contain, besides the minutes of the Fifteenth Session and the reports of various committees, a number of most interesting and scholarly articles. In fact, the number of articles are many and from men whose writings are always appreciated. The transactions make a handsome volume, clearly printed with a great many fine illustrations.

LITERARY NOTES.

Nothnagel's Encyclopedia of Practical Medicine, Edited by Alfred Stengel, M.D., Professor of Clinical Medicine in the University of Pennsylvania. Visiting Physician to the Pennsylvania Hospital.

It is universally acknowleged that the Germans lead the world in Internal Medicine, and of all the German works on this subject, Nothnagel "Encyclopedia of Special Pathology and Therapeutics" is conceded by scholars to be without question the best system of medicine in existence. So necessary is this book in the study of internal medicine that it comes largely to this country in the original German. In view of these facts, Messrs. W. B. Saunders & Co., have arranged with the publishers to issue at once an authorized edition of this encyclopedia of medicine in English.

For the present a set of some ten or twelve volumes, respresenting the most practical part of this encyclopedia, and selected with especial thought of the needs of the practical physician, will be published. The volumes will contain the real essence of the entire work, and the purchaser will therefore obtain at less than half the cost the cream of the original. Later the special and more strictly scientific volumes will be offered from time to time.

The work will be translated by men possessing thorough knowledge of both English and German.

Each volume will be edited by a prominent Specialist of the subject to which it is devoted. It will thus be brought thoroughly up-to-date.

The American edition will be more than a mere translation of the German; for, in addition to the matter contained in the original, it will represent the very latest views of the leading American specialists in the various departments of Internal Medicine. The whole system will be under the editorial supervision of Dr. Alfred Stengel, who will select the subjects for the American edition, and will choose the editors of the different volumes.

Unlike most encyclopedias, the publication of this work will not be extended over a number of years, but five or six volumes will be issued during the coming year, and the remainder of the series at the same rate. Moreover, each volume will be revised to the date of its publication by the American editor. This will obviate the objection that has heretofore existed to Systems published in a number of volumes, since the subscriber will receive the completed work while the earlier volumes are still fresh.

The usual method of publishers, when issuing a work of this kind, has been to compel physicians to take the entire System. This seems to us in many cases to be undesirable. Therefore, in purchasing this encyclopedia, *physicians will be given the opportunity of subscribing for the entire System, at one time; but any single volume or any number of volumes may be obtained by those who do not desire the complete series.*

This latter method, while not so profitable to the publisher, offers to the purchaser many advantages which will be appreciated by those who care to subscribe for the entire work at one time.

This American edition of Nothnage's Encyclopedia will, without question, form the greatest System of Medicine ever produced, and the publishers feel confident that it will meet with general favor in the medical profession.

The Living Age fulfills its function of presenting the best things from Continental as well as from English sources by beginning, in its issue for Nov. 23, a serial story by Jean Rameau, entitled "A Father of the Fieds," which, in its vivid and truthful pictures of rural life, reminds one of the best works of Rene Bazin.

ABSTRACTS of the Leading Articles of the Month.

Appendicitis: With Special Reference to Diagnosis and Treatment.

W. H. Mitchell, in Therapeutic Gazette, in concluding an article emphasizes these salient points:

1. It seems fairly clear that appendicitis should be usually treated as a medical disease, unless suppuration, gangrene, or perforation occur.

2. We are never justified in advising an operation while the appendix is inflamed, just to prevent complications.

3. If accurate diagnosis and skilful medical treatment were applied in every case, these complications would be infrequent and the death-rate greatly diminished.

4. In recurrent appendicitis it is our duty to advise removal of the appendix between attacks.

5. Imagine yourself in your patient's place, and treat him as you would wish to be treated yourself.

Acute Dilatation of the Stomach.

H. C. Thomson says in Lancet, that acute dilatation of the stomach is probably allied in its causation and nature to the paralytic distention of the intestines which frequently occurs after severe abdominal operations, and also in inflammatory conditions of the peritoneum. At present, there seems no adequate explanation as to why the intestines should be distended in some cases and the stomach in others, though most likely this depends on the difference in reaction to stimulation of the several nerve ganglia. It is possible that some cases occurring after operation are due to the effect of the anæsthetic upon the nervous system. Treatment of recorded cases seems to have been of little avail. The passing of a tube into the stomach has given but temporary relief Reliance should be placed on rectal feeding, and the tendency to collapse may be combated by hypodermic injections of strychnine. Some of the more serious symptoms are undoubtedly due to the loss of large quantities of fluid, and saline solution should be used either by enema or transfusion.

The Bacteriology of Otitis Media.

The following conclusions are based on a study of the literature of Otitis Media and the observations of the writer: John Funke, (American Medicine).

1. There is no specific organism of otitis media.

2. Acute otitis media is not invariably monomicrobic as is commonly held. The pathogenic organism present may be alone, but with it are frequently found a varying number of associated bacteria which may or may not be influential in determining the outcome of the case.

3. The organisms commonly found, in the order of frequency, are: The pneumococcus, streptococcus, pyogenic staphylococci (albus and aureus) and bacillus of Friedlander. I am strongly inclined toward the belief in a definite grippal otitis, primarily due to the influenza bacillus, which, however, becomes quickly associated with, or replaced by other oganisms.

4. The bacillus diphtheria is more commonly present in otorrhea than is usually believed; it may be (*a*) the initial infecting agent, (*b*) it may enter with the streptococcus or pneumococcus, or (*c*) it may be a secondary infection carried to the already infected ear by the fingers of the patient or otherwise, as held by Baginsky.

5. It is reasonable to believe, as my observations show, that it persists for a varying period of time in the discharges, and may constitute a center of danger just as has been thoroughly established concerning its prolonged residence in the nasal cavities, pharynx, etc. Its frequent associa-

tion with bacillus pseudodiphtheria has here the same significance as elsewhere, a factor not as yet fully determined.

6. The streptococcal infections are more grave and persist longer than pure pneumococcal infection, but both are usually supplanted by the staphylococci sooner or later.

7. There is a true pneumobacillary otitis usually acute and quickly converted into a mixed infection. The gravity of the process depends almost exclusively upon the character of the mixed or secondary infection.

8. Chronic suppurative otitis media is practically always a sequence of the acute.

9. Like the acute it possesses no specific organism.

10. Unlike the acute it is practically always polymicrobic.

11. Its polymicrobic character may be evinced in any of three ways: (*a*) A mixed infection of pathogenic organisms (usually pyogenic staphylococci) with one or more bacteria are absent, and the discharges are maintained through the activity of organisms that commonly lead a saprophytic existence.

12. While anaerobic organisms may play an important part in the pathogenesis of chronic suppurative otitis media, my observations have not established their almost constant presence as maintained by Rist.

13. The fetor met in the cases here reported can be explained by the presence of Bacillus pyogenes fœtidus without anærobic organisms.

14. All clinical and collated bacteriologic data indicate that otitic inflammations present different bacteriologic findings in different localities. According to Moos, during the influenza epidemic of 1890, the otitic complications were due to the pneumococcus in Vienna (Weichselbaum), and to the streptococcus in Strassburg, in Griefswald and in Bonn (Ribbert).

15. Reports gathered from literature establish the existence of a primary tuberculosus, but all observers are of one mind as to the almost utter impossibility of routine demonstration of the bacillus in the discharge.

16. For the demonstration of the tubercle bacillus in suspected cases I would recommend the examination of tissue obtained by the curet.

Concerning the Clinical Significance of the Klebs-Loeffler Bacillus.

Adolph Rupp in the Medical Reeord, says, from the present study it will be seen that the surest fact concerning the clinical significance of the Klebs-Loeffler bacillus is that it is still in an evolutionary stage. The knowledge we have of it is far from complete and is the result of much patient observation and thought, not of any one observer, but of many. During the past ten years or so, the practitioner has been having drilled into him that there are practically at least three kinds of diphtherias. (1) Laboratory or experimental diphtheria, that is the specific Klebs-Loeffler bacillary toxin diphtheria; (2) Clinical diphtheria, in which Klebs-Loeffler bacilli are assumed to be the predominating, if not the only, etiological factor, and (3) clinical diphtherias, in which Klebs-Loeffler bacill are absent or, for various reasons, are not detected.

All that the practitioner, as a rule, knows of laboratory diphtheria, he knows through laboratory reports; and as a matter of knowledge and faith, it is purely theoretical. The author in closing his article gives the following summary:

1. Clinically there are two kinds of diphtherias when Klebs-Loeffler bacilli are taken into account: (*a*) Those having Klebs-Loeffler bacilli present, (*b*) Those having none. Both forms, however, developed the same clinical signs and symptoms, the same complications and sequelæ—von Behring to the contrary.

2. The character or quality of the Klebs-Loeffler bacilli that may be present in any case of diphtheria does not prognosticate its course or termination.

3. Klebs-Lœffler bacillary diphtheria may be so mild as to simulate tonsillitis, and yet the most virulent Klebs-Lœffler bacilli be present.

4. Virulent Klebs-Lœffler bacilli may be present in the throats of healthy people, never doing any harm to persons harboring them, nor harming in any noticeable way or manner those who have come into close and intimate contact with the bacilli-infected people.

5. Klebs-Lœffler bacilli are found associated with other bacteria in other diseases than diphtheria, but they fail to exert any appreciable influence on the progress and decline of those diseases.

6. Klebs-Lœffler bacilli vary much in size and shape from a regular and artificially determined type, the quantity and quality of their toxicity is not bound in any special or definite way, to fit any particular typical or atypical form, if the most recent bacteriological utterances on the subject be true.

7. The virulency or disease-promoting qualities of Klebes-Lœffler bacilli can be determined only by experimental inoculation tests. All that the microscope can do in this matter is to differentiate their forms;

every other delivery based on microscopic investigation alone is largely guesswork or hypothetical speculation.

8. The ubiquity of Klebs-Lœffler bacilli, their irregular and varying forms, besides the inconstancy of the toxic qualities occurring as they do with clinical phenomena that are in no determinable way to be correlated with these physical irregularities of Klebs-Lœffler bacilli, makes it impossible to grant them any primary specific etiological importance in the pathogenesis of clinical diphtherias.

9. The "necessary influences" and the "favoring condition," besides other factors of which we are still ignorant, enfold within themselves the secrete of the real causes —not cause only—of clinical diphtherias.

10. The assumed etiological and pathogenetic supremacy of Klebs-Lœffle- bacilli is largely, if not altogether, a synthetical demonsraation. And, although this synthesis is not altogethe "a bridge of fancies" enthusiastic labaratory workers and their unquestioning foliowers, both lay and pro fessional, are traveling to and fro over it unhampered by any of the odious uncertainties and dfficulties that have been presented in this paper. And, of course, a bridge that will not load itself with what it cannot bear will give support to any amount of "will to believe," but break under the weight of facts that it denies passage to.

Croupous Pneumonia.

Croupous pneumonia more than any other disease, as Wilson remarks, in Journal of the American Medical Association, demands a very large series of cases to determine the efficiency of any kind of treatment and he advocates the expectant stimulating and supporting treatment. The method of the German Hospital in Philadelphia is outlined. The diet consists chiefly in milk and light broths, though some variety is allowed in small amount. When the patient takes from one to two pints of malk and a pint of chicken or mutton broth every twenty-four hours it is regarded as sfficient. Water is give freely but in small amounts. Under ordinary conditions the patient is sponged night and morning, the temperature being regulated by the sensation. If the bodily temperature exceeds 104 F. cold sponging may be repeated at intervals of two to three hours and in the early course of the attacks two or three large flat ice-packs are applied to the affected side for the purpose of making the patients feel more comfortable. Alcohol is given, in the majority of cases ordinarily not over four to six ounces of whiskey in twenty-four hours, though larger amounts may be given to patients accustomed to its use. A calomel purge is commonly given on admission—in fractional doses if there is nausea and vomiting. Opiates are used for pain generally in the form of Dover's powder in two or three grain tablets, diminishing towards the close of the attack. Cardiac sedatives are seldom given, digitalis sometimes in response to direct indications. As a rule strychnia is given as a cardiac stimulant, and the nitrites, especially nitroglycerin, especially for the relief of the laboring right ventricle. If these measures fail and small mucous rales and cyanosis occur, venesection is indicated. If pulmonary edema supervene, atropin is given hypodermically often with apparently good results. Dyspena is combated with oxygen well diluted with air. Dover's powders will control the nervous symptoms to some extent, and increase in the quantity of alcohol together with cold applications to the head and neck. Neither poultices nor cotton jackets are allowed. The patients wear a moderately heavy, loose-fitting merino undershirt. At the crisis the patient is carefully watched, and if the Dover's powders have been discontinued, a hypodermic injection or an opium suppository is administered. In some cases ammonium carbonate, alcohol or hot coffee seem indicated. Collapse is very rare. During convalescence an abundantly nutritious diet is given. Bitter tonics are sometimes employed, and there is no hurry about the patient's getting out of bed.

Cesraean Section.

C. L. Ill, in American Journal of Obstitrics, offers the following:

1. Ventrofixation must be an operation of the past in all patients during the child-bearing period.

2. Cesarean section should be done more frequently than heretofore, and in all cases where the child's life is in imminent danger and the mother's future health at stake.

3. Early cases of uremic convulsions with a tightly closed cervix, especially in primiparæ, afford a better chance by Cesarean section than by any other means.

4. The fundal incision has the advantage of a smaller wound and is less likely to form adhesions to the anterior of the abdomen.

5. Absolulely absorbable material should be used in closing up the uterine wound.

6. Operations previous to the begining labor are as successful as, if not more so than, done after the beginnining of labor.

7. Quickness of operation and perfect asepsis are greatly to bed desired in all case.

Examination of the Mouth in Infancy and Childhood.

Jacob Sobel in Medical News says the more one examines infants and children the more deeply does he become impressed with the importance of a thorough and systematic inspection of the mouths of these little patients. He is of the opinion that this procedure is considered too trival and is too much neglected. For a thorough inspection of the mouth in infants and children three conditions are absolutely necessary, namely · good position, good light and good tongue depression.

A complete inspection embraces four views., (1) : cheeks, lips and gums,(2) ; under surface of the tongue and floor of mouth, (3) ; upper surface of the tongue, (4) ; hard and soft palates, fouces, tonsils, pharynx and epeglottis. It is well for the physician making an examination of the throat should wear a pair of glasses in cases known to be contagious or in suspected ones.

Infection in a General Surgical Sense.

Daniel N. Eisendrath in American Medicine says :

The most frequent forms of surgical in fection in the human being are produced by streptococci and staphylococci. The writer regarding this subjec gives the following summary at the close :

1. Ample incisions to lay bare every portion of the infected area, and counterincision to relieve the collateral edema.

2. General anesthesia and a bloodless method of operating whenever possible.

2. The disinfection of an infected wound with strong antiseptscs, etc., is of little avail, and may do great harm.

4. We should place most dependence upon free drainage and moist dressings, with the use of mild anti-septics. No powder should be used until granulation is well established.

5. Absolute rest and elevation of the infected area.

6. After-treatment by secondary suture and early active and passive motion.

7. General treatment : Strychnin, whisky and attention to the excretory organs.

New Disease.

Carhart in Journal of the American Medical Associatiom describes a disorder which has no marked prodromal stage, commencing with a nervous chill, intense pain in the back and abdomen, but not with the usual malarial pyrexia and sweating. Soon after the rigor sets in the head becomes intensely hot acute pain, usually beginning in the medulla oblongata and extending over the top of the head to the forehead. There is extrem restlessness, but rarely loss of consciousness, though occasionally delirium. The general temperature rises, but not in proportion to the cerebral heat. The tongue is coated with the thinnest possible, delicate, bluish-white coating, not foul in any part; no red lines or margins; not usually flabby with indentations. Thirst is almost absent; water seems to aggravate the prevalent slight nausea. There is almost complete anorexia and emaciation is rapid. The bowels are more or less constipated, the kidneys little damaged, occasionally slight albuminuria, no sugar. The disease does not seem to be contagious. All the case occurred in the early autum, after a hot, dry summer. A resemblance to cerebrospinal meningitis is noticed, but there were no spots or streaks of congestion on the face, forhead or ears and some other differences, no spots or patches. The tongue is different. Quinin seems to aggravate the condition and the best treatment in his experience has been the use of mild laxatives, potassium bromid for the nervous symptoms, and cold water to the head with occasional hot footbaths. The gradual flow of cool water on the head seems to have the best effect. Absolute quite and freedom from all excitement must be maintained. He does not report the proportion of fatalities, though it does not seem to be usually or generally fata lfrom the tone of his remarks.

Colitis or Asylum Dysentery?

Thomas Claye Shaw, in the Journal of the American Medical Association. The author contends that asylum colitis is not a bacterial dysentery, as some have thought but due to a condition of nerve degeneration tending to ulceration of the bowels, occurring in the insane, especiolly on account of their disordered general metabolism, their irregular habits of overfeeding and taking into their system of substances which are liable to produce trouble. It is quite possible that it may be due to some toxic condition set up in the individual. The presence of bacteria does not always indicate that these are the cause of the presence of the disease. During the conditions of lowered vitality in the mentally diseased the bacteria are apt to be in evidence more than in other cases where insanity does not exist

The Cosmetic and Visual Results in Squint.

The early age at which squint usually shows itself adds much to the difficulties of our gaining knowledge of the pre-existing conditions. J. Morrison Ray in the Jounr-

nal American Medical Association emphasizes the following points:

1. This effect gained in the treatment of strabismus, whether parallelism of the visual axes be obtained by a cycloplegic, glasses, orthoptic exercise, or an operation, is largely, we might say, wholly cosmetic.

2. Glasses should be adjusted to the eyes of squinting children at as early an age as possible, depending upon the ability of the parent to control the child; and they should always be worn for a sufficient length of time to determine their effect upon convergence, before any steps in the way of an operation are undertaken.

3. The use of the exclusion-pad and orthoptic training are advisable, not so much in the hope of increasing the vision in the squinting eye, as to improve the power of co-ordination in the recti muscles, so that when the child reaches the proper age for operation the power of simultaneous muscle action will not have been lost.

4. Binocular single vision is not present in more than 7 per cent. of cases of squint, and its production in a larger percentage uncertain and unsatisfaciory. Parallelism of the visual lines does not mean binocular single seeing.

5. Double images are not necessary for a successful issue. Cosmetic results can be obtained and maintained where the fusion power is absent. This is true in monocular squint with great amblyopia as well as in the alternating form.

6. Congenital amblyopia is often found in eyes that do not squint, especially combined with hypermetropia and astigmatism, and often in members of a family where squint in others is present.

7. In alternating squint if the hypermetropia is of a high degree the chances for producing parallelism are better than when the hypermetropia is low. In alternating squint with hypermetropia of a medium degree the necessity for an operation and the difficulties of producing parallelism by tenotomy are greater than in monoeateral squint.

8. The effect of a tenotomy is greatly influenced by the amount of abducting power present in the corresponding externus. This should always be especially noted in the alternating variety.

9. Two tenotomies on the same internus is bad surgery, since it invariably leaves a sunden caruncle and later divergence,

10. From a cosmotic standpoint the correction by operation is not as simple as might be supposed. What is gained by straightening the eye, if there is left a noticeable exophthalmos with limited motion of the both outward and inward?

Meningitis.

I. R. Sevigart (Western Medical Review).

In 1898 the Chicago board of health published tho following conclusions:

1. That epidemic cerebrospinal meningitis is to be classed among the contagious diseases belonging in this respect to same category as phthisis pulmonalis.

2. That unsanitary conditions exert a great influence in affording a proper medium for the growth of the germs of this disease.

3. That the health authorities should receive notice of the occurrence of a case of this disease in order that sanitary defects may be remedied.

4. That persons afflicted with this disease should, whenever possible, be isolated and all evacuations rendered sterile by the use of antiseptics.

There is no question about it being a dangerous disease, and form the foregoing it would appear to be a communicable one also. How the germs reaches the meninges is not actually known, but it is believed to be mainly through the blood, and that in many cases the germ enters the blood through the intestinal tract from typhoid or other enteric troubles, as wasting diarrhea, or through the skull itself from mastoid abscess.

The Massachusetts state board of health concludes that "There is little doubt that all cases of meningitis are cerebrospinal, the meninges of the cord being affected as well as those of the brain."

It is evident that the disease is communicable mainly through the discharges from the nose, air passages, the bowels, and possibly the kidneys, hence the most certain preventive would be to destroy these discharges. It may be concluded tnat it is difficult to meet these fine, yet uncertain lines, for we at once come to the spitting nuisance, which is so dangerous to the public health. But such discharges as from the ear, any abscess, erysipelas, diarrhea, or any excretion could and should be destroyed, and thus prevent the possibility of infection.

Thh Management of Miscarriage and Abortion.

W. W. Cross, (Occidental Medical Times).

The writer for convenience of discussion divides the cases of miscarriage and abortion into; (1) Those we may cheek; (2) Those we cannot stop; and (3) Those we see late in the trouble, in which a portion or all of the contents of the uterus still remain, and in which we find offensive masses of tissue which so often lead to a fatal

termination. When the case is bound to end the pregnancy, disinfect the vagina, give a hot intra-uterine douche of some antiseptic solution, and pack the vagina tightly with iodoform gauze and cotton. With this method of treatment on our next visit upon examination the uterus will be found empty and walls smooth inside. Should there be ratained membrane and tissue in the uterus which cannot be removed by washing, the use of the currette is advised. By curettement we do not portion of the contents of the uterus is removed, but we mean that the uterus is emptied entirely and the surface left in such a condition that no trouble con result.

Permanent Catherterization.

J. Rilus Eastman (Journal of the American Medical Association).

Permanent catheterization in the male has been practiced by the writer in fifteen cases. In each case the catheter was retained for more than ten days, and in two instances for more than sixty days. The catheter used were soft rubber, large size, with two eyes. The presence of a properly applied retention catheter should not produce cystitis. It has been urged that continued use of the retained catheter will conduce to atony of the bladder. This is, not a valid argument against its use in properly selected cases. There are many good reasons why permanent catheterization should be selected as the method of choice for routine in selected cases in draining the urinary bladder. Among these the following may be mentioned:

1. By its use the urine is removed by the natural exit.

2. If used after operations involving opening of the posterior urethra until the perineal defect is closed, the period of convalescence is shortened since the perineal wound closes promptly if the urine be drained through the urethra.

3. The caliber of the urethra is maintained or even increased, and the subsequent passage of instruments is rendered easy.

4. Much of the tedious work of after-treatment, as sounding, becomes unnecessary or is decidedly lessened.

5. After perineal section involving removal of a portion or sounding is exceedingly harmful and difficult of execution; hence, maintainence of the urethral lumen becomes a serious task. If, however, the retained catheter is used, sounding becomes unnecessary and the new segment of urethra has a guide over which to form itself.

6. The urine may be thus accurately drained into a receptacle, and bedsores, dermatitis and much discomfort are avoided.

7. The danger of uremic poisoning is reduced, since the area of the unprotected tissue with which the urine must come in contact is diminished. For the same reason the danger of bacterial infection or intoxication is lessened.

8. Pain and fever are notably slight during permanent catheterization, if care be exercised that the instrument does not project too far into the bladder.

9. Soft and hard infiltrations which may narrow the caliber of the urethra are removed by the pressure absorption produced by the presence of the catheter.

10. Drainage of the bladder in cystitis may be accomplished by this method without subjecting the patient to a more or less dangerous surgical operation, as must be done when suprapubic or perineal drainage is employed; here also the possibility of delayed non-closing of the wound enters into the consideration. The catheter may often be introduced in such cases with as little pain and inconvenience as accompanies the introduction of Skene's catheter for permanent catheterization in the female.

Diagnosis and Treatment of Appendicitis from a Practical Standpoint.

O. Grothan, (West Medical Review.)

In discussing this disease one class of men will say, as soon as diagnosis is made of appendicitis every patient should be subjected to operation. Another class of men assert that operation for appendicitis should never be done. In other words, the subject is generally treated as though appendicitis is appendicitis, and always the same wherever found.

In the treatment of every case of appendicitis, these question must be answered: Shall we give opium? Shall we give purgatives? Shall we give both, or shall we operate? It should be mentioned that the disease is discussed under the heads of Catarrhal Appendicitis, Suppuration and the Acute form. Whatever has been our past inclination in dealing with this disease, the future treatment will rest on a safer and more logical basis. Purgatives should not as a rule be given except in cases where we have a history of a large amount of indigestible food having been taken and this is suspected as the cause. Even in this condition carefully administered enemata should rather be depended upon. To recapitulate:

1. In catarrhal appendicitis, which embraces the great majority, do not operate. Opium, anatomic and physiologic rest to the tractus intestinalis.

2. In suppurative appendicitis, operate, but, as a rule, wait for abhesions to shut

off the peritoneal cavity. If temperature is high, pulse rapid, and vomiting persistent it is better to err on the side of early operation.

3. In acute perforating and fulminating appendicitis, operate as soon as the diagnosis is made, and see to it that the diagnosis is made early.

Early Intervention in Acute Mastoiditis.

Dench, in American Medicine, reports a case of acute otitis media in a woman of 28, who at the same time suffered from an inflammation of the mastoid cells, as evidenced by the history of tenderness over the mastoid process, and the development of a fluctuating tumor behind the ear. The patient was referred to the author by a colleague on account of the hearing growing progressively worse, in spite of the fact that all acute symptoms had disappeared. He had nothing to lead him to suppose, at the time of his first examination, that there could possibly be any involvement of the mastoid cells aside from the sinking of the upper and posterior wall of the canal and the corresponding portion of Schrapnell's membrane. An otoscopic examination four months later gave no additional evidence of an inflammation of the mastoid process, but in spite of this fact, the patient had slowly developed a suppurative process originating in the masstoid cells, which had evacuated itself spontaneously through the mastoid, thus forming a postarual abscess. A typical mastoidectomy was performed and the patient made an uneventful recovery. Dench believes that in every case in which there is any evidence of mastoid involvement, it is safer for the patient that the surgeon should advise immediate operation, simply for the purpose of exploration, rather than attempt to abort the inflammatory process.

Preperitoneal Rupture of the Bladder.

Wyeth, in American Medicine, reports a case of surgical rupture of the bladder in a man of 31 while being prepared for drainage through a suprapubic incision. The patient was under ether and 14 ounces of sterile water had been thrown into the bladder to lift it so that the peritoneum could be easily avoided. The detention was then perceptible by a slight elevation of the abdominal wall just above the symphysis pubis, but before the incision could be made this subsided, indicating that the bladder had been ruptured. Cutting rapidly through the intervening tissues the author found only four ounces of fluid in the bladder and a rupture three-fourths of an inch in length a little to the left of the median line in front, but entirely within the prevesical space. No fluid had entered the peritoneal cavity. The patient finally made a good recovery. Wyeth says that in cases in which the habit of micturition has prevailed through several years, leaving the bladder in a more or less permanently contracted condition, it would be advisable to contend with the difficulties and possible dangers of operating through a narrower incision, with from eight to ten ounces of injected fluid, rather than run even the very small risk of rupture of this organ by employing the greater quantity.

Peripheral Neuritis in Beer Drinkers—Its Precise Causation and Diagnosis.

Reynolds describes, in Journal of the Amercan Medical Association, the neuritis in beer drinkers, which has been so prominently before the medical profession of late, and raises the question whether alcohol neuritis may not be due to arsenic, as was proven to be the case in the Manchester epidemic. There is the possibility, of course, that both may produce a neuritis and that the two poisons act in combination, but he believes ethyl alcohol alone never has done it when given experimentaly to animals. He can not bring himself to believe that every case of alcoholic neuritis recorded has only been caused by arsenic, but thinks large numbers have been due to the combined action of the two poisons, and that arsenic in an alcoholic subject is much more virulent as a producer of neuritis than when taken alone. He suggests also that beri-beri has been diagnosed for states really due to arsenical poisoning.

Chorea and Rheumatism.

During the last seventeen years Laache, in Journal of American Medical Association, has had occasion to observe 390 cases of acute rheumatism, and has traced them to date, but has been unable to discover a single case in which chorea appeared. He is inclined to define chorea as a "growth neurosis," an anomally in development, although he admits an endocardo-rheumatic, infectious variety and a neurasthenic. Four of his forty patients with cholera died. In two the autopsy disclosed fatty degeneration of the kidneys, and in two endocarditis. He attributes great importance to fright, as a determining cause. School chorea is due to anemia and chlorosis fully as much as to mental strain. Pains in the joints were noticed in 18 per cent. A heart affection was evident in 42 per cent., but it was slight in all but 18 per cent. He considers arsenic the chief reliance in treatment, administered by the mouth or in the

form of subcutaneous cacodylic injections. He has found potassium bromid the best and most harmless narcotic.

Inguinal Adenites.

Charles C. Miller, (The Wisconsin Medical Recorder):

The writer thinks with the proper management of these cases the prognosis which offers not too immediate relief they may rank among the most satisfactory of his patients. In the incipiency where the glands are just palpable or the entire process has about reached the size of the last phalax of the thumb, they may be frequently dispelled by the repeated daily applications of liquid guaiocal. This is better than iodine. Should this fail a pressure bandage may be used often with success. When the glands are much smaller and pus has formed, an ancision about one inch long will result in resolution without disentegration of the glands much to the relief and comfort of the patient. It is always better to try some of the following drugs internally: The iodides, mercury, gold, the phosphates, hydrates, stillingia and the like.

Special attention should be given to diet and hygienic surroundings and personal cleanliness will prove to be distinct factors in these conditions. The writer believes it is best that these cases should suppurate and thus rid the blood of the toxic matters discharged in such a course.

Retrodisplacements of the Uterus in Young Girls and Unmarried Women--Their Frequency and best Methods of Treatment.

Posterior displacements of the uterus are universally recognized as being capable of producing many difficult and diverse symptoms, either from pressure upon neighboring organs or reflexly upon remote ones. Hernean E. Hayd, in the American Journal of Obstetrics, concluding a paper on this subject, the author says:

1. A plea for the more careful examination of young women by competent and skilled men who can undertake any operative measures that are necessary.

2. Every case of retrodisplaced uterus in the young or unmarried or married woman may not require any treatment.

3. If they produce a definite symptomatology, the Alexander operation should be employed, if the case be an operable one; that is, if the uterus is freely movable and the tubes and ovaries are healthy.

4. Retroversions and rhetroflexions in the young and unmarried should never be treated by pessaries, but the Alexander operation. Tampons and pessaries have their place in rhetro-displacements in married women or women who have been pregnant, but they accomplish practically nothing.

5. The Alexander operation is safe and without mortality incident to the operation, and no harm can come from its proper performance; even the uterus subsequently falls, the patient is not worse off than she was previous to the operation.

6. It does not in any way interfere with pregnancy and future child-bearing, but on the contrary materially helps the possibility of pregnancy.

7. No pain or distress follows the operation if the case operated upon be properly selected; and if pain and suffering result, there existed at the time of the operation latent tubal and ovarian trouble, which sooner or later perhaps would have required a radical operation. If it becomes necessary to do a celiotomy on a person who previously had an Alexander operation, the uterus will be found in its normal anteflxed position, which is necessary in every case, whether the tubes and ovaries are removed or not, to insure good health and freedom from future suffering.

Respiratory Movements of the Precordial Area in Health and Disease..

Aikman, in the Boston Medical and Surgical Journal, calls attention to a point which may be of service in diagnosis of early stages of pericarditis or endocarditis. Careful inspection in a normal case will show that the third left intercostal space moves appreciably less at its sternal end during respiration than does the right (lateral curvature or rhachitic deformity will mask the the sign). The area of limited movement is very small, not extending to the left beyond the junction of rib and cartilage, and not usually upward to the second interspace, except in children; it usually does extend to the fourth interspace, being masked below that by apex beat. In pericarditis, a marked dimunition in the movement of the third space precedes the stethoscopic signs by a period varying from one to four days; quite promply the limitation of movement extends to the second and even the first space, and increases, less markedly to the left. At this time there may be no other physical signs, but these are never lacking more than four days. The marked limitation disappears with recovery and reappears as a sign of relapse. In endocarditis the variations of chest movement are less in degree, the decrease is less upwards, the return of movement follows more slowly the diminution of stethoscopic signs, and more limitation remains as a record in cases of permanent damage.

Strabismus--Its Treatment.

A. Edward Davis, (Journal of American Medical Association), concluding an article on this subject, says:

1. That it is desirable that we have a uniform or standard set of tests for the accurate measrements of strabismus.

2. A better understanding of the physiological action of the ocular muscles and of physiology in general, than at present obtains, should be had by those treating and operating on strabismus cases.

3. The amblyopia present in most cases of convergent strabismus is functional and acquired, and not congenital except in rare cases.

4. The non-operative treatment of strabismus—atropin, the exclusion pad, and, in patients old enough, glasses, the steroscope and bar-reading—should be begun as soon as the squinting is observed; for, it is in the early cases that this form of treatment is capable of doing so much good. By means of it, if the case is taken in time, false fixation and suppression of the images in the squinting eye are prevented, fusion of the images encouraged, and form-perception, that is, true binocular single vision often maintained. Even where one or more of these functions have been lost persistent effort in the non-operative method of treatment frequently restores them.

5. About 30 per cent. of all cases of strabismus may be cured by non-operative treatment alone.

6. Just as soon as the non-operative method of treatment ceases to improve the condition of the squit, it is time to operate. Delay in operating after this is not only useless but harmful, because the habit of suppressing the image in the squinting eye becomes fixed and the amblyopia worse.

7. After the eyes have been operated on, the use of the steroscope, bar-reading, the pad, glasses, etc., are of the utmost use in completing the cure.

8. Panas' method of operating for strabismus by stretching the muscles before cutting them is to be recommended as safe in execution, quick in results and efficient. It should never be performed while the patients' eyes are under the influence of a hydriatic.

The Treatment of Croupous Pneumonia.

Many and varied are the treatments recommended for this disease. Some are in favor of what is known as a specific treatment and then we have the expectant symptomatic plan. It was once treated by huge doses of infusion of digitalis with remarkable success, Osler says "Pneumonia is a self-limited disease which can neither be aborted nor cut short by any known means at our command; and again, "There is no specific treatment for Pneumonia."

The plan of treatment used at the German Hospital, given by James C. Wilson, in the Philadeldhia Medical Journal, is well worthy of consideration:

The diet consists chiefly of milk and light broths. Junket, custard and like gruels are given if the patient cares to take them. In private practice a little ice cream and sometimes raw or stewed fruits may be given. Grapes are often acceptable. All these things are given in all amounts. If the patient will take from one to two pints of milk and a pint of chicken or mutton broth each twenty-four hours it is regarded as sufficient. Water is given in abundance, not more than two ounces at any one time. Under ordinary circumstances the patient is sponged night and morning with water, the temperature of which is regulated by his sensations. If the temperature exceed 104 deg. F., sponging may be repeated at intervals of two or thre hours. Early in the course of the attack two or three large, flat ice-bags are applied to the affected side. These to some extent relive pain and make the patient feel more comfortable. They have a slight effect in reducing the temperature, but none whatever upon the extension of the exudate or the course of the attack. Alcohol is given in a majority of the cases. Ordinarily the amount does not exceed four or six ounces of whisky in twenty-four hours. Larger quantities are given to those accustomed to its use.

A calomel purge is commonly administered at the time of the admission of the patient to the ward. If there be nausea and vomiting calomel is given in fractional doses. In the absence of these a single laxative dose is administered. If necessary, a saline is subsequently given. The calomel is frequently repeated once or twice during the course of the attack. If there be great pain, morphia is administered hypodermically. In any case Dover's powder, usually in the form of tablets of two or three grains, is administered every 2 or 3 hours throughout the greater part of the course of the attack. The dose of this medicine is so regulated as to reduce a slight continuous drowsiness, from which the patient may, however, be readily aroused. By this means suffering is diminished, cough is to some extent controlled and the excitement and apprehension common in pneumonia allayed. No evil effects have been attributed to this use of opium. Toward the close of the attack Dover's powder is given with diminishing frequency. Expectorants are rarely employed. Fresh aromatic spirit of

ammonia and the ammonium carbonate are sometimes given. If they do no good, they have never appeared to do harm. Aconite and veratrum viride are never given, and digitalis only in response to particular indications. If the pulse becomes small and frequent, especially if it becomes irregular, digitalis is sometimes given in full doses, not because the patient is suffering from pneumonia, but on account of the condition of the heart. In many cases strophanthus has answered a better purpose. As a rule strychnia is given as a cardiac stimulant and the nitrites, especially nitroglycerine, for the relief of the laboring right ventricle. These measures failing with increasing signs of failure of the right heart, the development of small mucous rales and cyanosis, venesection is practiced. If pulmonary edema occurs, atropine is given hypodermically and many times has seemed to avert the fatal issue. Dyspnea is regarded as an indication for the use of oxygen, care being taken that in the administration it is freely diluted with air. Nervous symptoms and delirium are to some extent controlled by the systematic administration of Dover's powder. They demand an increase in the quantity of alcohol. Ice to the head, cold sponging or the cold pack are useful, and in young robust individuals delirium tending to pass into coma is treated by cold effusions to the head and neck, repeated at intervals of three or four hours. These are often followed by marked improvement. Neither poultices nor cotton jackets are allowed. The patients wear a moderately heavy, loose-fitting merino undershirt. Blisters are not used save in the case of delayed resolution, when a series of small flying blisters are sometimes applied. At the crisis the patient is caregully watched. If the Dover's powder has been discontinued, a hypodermic injection or an opium suppository is administered. In some cases ammonium carbonate, alcohol or hot coffee appear to be indicated. Collapse is very rare. During convalence an abundant nutritious diet is given. The patient is permitted to have meat as soon as he desires it. Bitter tonics are employed in some cases and we are in no great haste to yield to the patient's wish to get out of bed.

Value of Cocain in Obstetrics.

F. Westphalen, Journal American Medical Association: Tedious, difficult delivery can be promoted and hastened by cocainization of the pelvic floor. It does not suppress the true labor pains, but actually strengthens them, while at the same time it arrests the reflex inhibiting influences which are protracting the birth process. Westphalen has found that after a suppository of 3 cg. cocain has been introduced into the rectum the labor pains become regular, the pauses tranquil and delivery follows in a comparatively brief time. His experience with this measure in the last two years has been extremely satisfactory. The labor pains become regular in five or ten minutes after the supository has been introduced. No toxic effects were observed in any case, but he established by personal experience that 3 cg. of cocain in the rectum induced slight mydriasis for half an hour, and consequently, he has never surpassed this dose, but has occasionally repeated it in one and a half hours.

The Treatment of Pneumonia in Children.

The first thing that Georgina Grothan suggests, in the Western Medical Review, concerning the treatment of pneumonia in children, is to avoid too much medication. This is good advice. Special attention should be paid to hygiene and careful nursing; mild cases require no other treatment. A frequent change of position is necessary, no child should be allowed to lie for any great length of time on the back. The mustard paste is recommended for pain. Hot flax-seed poultices, so highly recommended by some text-books, should be looked upon as a relic which has long since fallen into disuse.

Milk is the best article in the way of food. So long as the temperature does not reach over 10x20, special attention should be given to it. Should the temperature prove stubborn and high cold applied to the head and cold sponging is far superior to any drug. The coal tar products are only mentioned to be condemned.

In cases of pneumonia seen early the gastro-intestinal tract should receive our first attention. Calomel in combination with an intestinal antiseptic is the best for this purpose. In a disease like pneumonia, thorough elimination and enteric antiseptics are of primary importance. For this purpose the writer recommends two drugs, salicylate of sodium, in small doses every two hours, for its chologogue and antiseptic effects, and cromatic fluid extract of cascora sagroda. The kidneys, too, should receive special care. The remedy is par exeellent for this purpose and one that rarely gives dis appointment is liquor ammonium acetates spiritus etheris nitrosi is sometimes indi cated. For its stimulating effect strychnine sulphate should be given throughout the entire disease. In cases of seemingly sud den collapse which are liable to come on a any time may be combatted by the admin istration of nitro-glycerine hypodermically

The mustard bath is highly recommended in those cases of cardiac or respiratory failure with cyanosis, cold surface, rigid pulse, &c. For sleeplessness large doses of bromide of soda are prepared. Epectorants are not recommended as they derange the stomach and are more or less depressing. Codeia sulphate is the best remedy for cough. Cerebral complications are best met with by cold applications to the head and mercurials.

By a general observance of the suggestions laid down in this paper the mortality in the treatment of the primary pneumonias in children will be almost nil.

Transmission of Tuberculosis Through Meat and Milk.

John J. Repp, concluding an article in American Medicine, offers the following summary and practical conclusions regarding this subject:

1. That tuberculosis may be transmitted to animals through their eating the meat of certain other animals which are tuberculous, or by their being inoculated with it.

2. That tuberculosis may be transmitted to other animals through their ingestion of the milk of certain cows which are tuberculous, or by their being inoculated with it, both when the udder of the cow is diseased and when it is healthy.

3. That, therefore, the meat and milk of certain tuberculous animals contain living, virulent tubercle bacilli.

4. That the tubercle bacilli of cattle are pathogenic for man.

5- That, therefore, the meat and milk of certain tuberculous animals are capable of producing tuberculosis in human beings who use these products as food.

1. In regard to meat.—The meat of all food animals, especially cattle, is unfit for food when the animal is highly tuberculous; but is safe for food when the animal is only slightly or moderately tuberculous, especially so if the meat is well cooked, provided the tubercular tissues are eliminated.

2. In regard to milk.

a. The milk of a cow with tuberculous udder is always dangerous for food unless it is well sterilized.

b. The milk of tuberculous cows with healthy udders is some times dangerous for food unless well sterilized. We cannot tell except by experiment, which is impracticable as a routine matter, when such milk is dangerous and when it is not. Hence the milk of tuberculous cows without disease of the udder should always be looked upon with suspicion, and either not be used or be used only after sterilization.

c. Tuberculous cows may be kept for breeding purposes provided they are isolated, even from their own offspring, and their products sterilized before use; or,

d. They may be slaughtered for food under conditions imposed by the conclusions stated above in regard to meat.

Case of Anthrax of the Face; Operation Recovery.

W. B. Platt and H. C. Ohle, Baltimore, Md. (Abstract of paper read before the Medical and Chirurgical Faculty of Maryland April 25 1901).

Anthrax, malignant pustule, malagnant carbuncle, charbon, and Woolsorter's disease, are different names for one and the same disease which has caused terrible loss of human and animal life in the past. At the present time it is chiefly dreaded as an epidemic amomg cattle, although isolated cases occur among human beings. The disease may usually be traced to contact with the hides, hair, wool or bristles of diseased animals. Farms, or parts of farms, which have been occupied by cattle suffering from anthrax become infected, and animals grazing on this ground contract the disease, sometimes many months after the last previous infection of cattle. This is due to the extraordinary vitality of anthrax spores which resist heat, cold, moisture, or drying, or even ordinary antiseptic agents for some time. The bacillus itself is destroyed much more easily. Apart from direct contact with the infected animal or its hair or covering, the infection is positively known to have been carried by the bites and stings of insects, and even by contact with flies which may have lighted or fed upon and infected animal. There are two forms of anthrax an external and an internal. The first causes local necrosis of the soft parts, with septicæmia as a result, the second affects the internal organs, the lungs, digestive tract, spleen etc., is much more difficult to recognize, and may assume the form of a gastro-enteritis or of a pneumonia.

The internal form of infection usually ends in death. The same is true of the external form unless vigorous measures are taken which will commonly save the patient, if instituted early.

This is best carried out by early excision of the infected necrotic portion with a portion (perhaps a quarter to half an inch) of the surrounding tissue.

There is no antitoxin treatment for anthrax in human beings which is to be recommended. Anthrax of the face or neck is much more fatal than when occurring in other parts of the body. The following case of Dr. H. C. Ohle's which was operat-

ed on by Dr. Platt, is interesting as showing a cure of anthrax of the face.

Patient first seen by Dr. Ohle, December, 4th 1900. E. M., was a male, 16 years of age. Face and neck swollen and œdematous. Temperature 103.6 pulse 110 respiration 22. Sleepy and delirious at times. Four days previously noticed a pimple on right cheek which itched intolerably. The next day a visicle took its place, the swelling gradually increased until the whole side of the face and neck became swollen and œdematous as far as the clavicle with some redness on the chest below the clavicle. At the site of infection there was a black, central, depressed, slough surrounded by a wreath of vesicles, This is characteristic of anthrax external infection, as usually seen. The patient had been working in a bristle factory. Operation by Dr. W. B. Platt, December 5 1900. The patient was etherized and the infected area with about half an inch of the surrounding tissues was excised with scalpel and thermo cautery, by two elliptical incisions. Infected tissue was friable and small vessels impossible to ligate were troublesome. Thermo-cautery to dull red heat completely controlled bleeding and enabled the growth to be easily removed. Wet bichloride dressing 1 to 4000 was used for 5 days, then boracic acid solution. The wound granulated slowly, but finally healed with small cicatrix. No sutures were employed and wound had been left open to drain freely.

Cultures from the portions removed showed the presence of anthrax bacilli. Statistics of anthrax of face and neck, even where operated upon, show a mortality of 20 per cent. Those operated on early, have an excellent chance to recover.

Among other plans of treatment than excision of the focus of the disease, the deep hypodermic injection of glycerin and carbolic acid (5 per cent solution) into the tissues about the wound may be mentioned, as next best to the one advocated. Excision is by far the best treatment.

Hydriatics in the Treatment of Chlorosis.

Dr. G. W. McCaskey, (Fort Wayne Medical Journal Magazine, October, 1901.)

Read in a symposium on chlorosis before a joint meeting of the Chicago Medical Society and Chicago Society of Internal Medicine, January, 1901.

He disclaims any intention of exalting his particular treatment as a specific for chlorosis, but asks for fuller recognition of Hydrotherapy as an important factor in chlorosis. He speaks of the marked oligochromemia as the most constant and distinctive feature, usually associated with varying grades of oligocythemia and believes there is a greater degree of oligemia than is usually recognized.

He speaks of the varying symptoms; including the weakness and disturbances of the circulatory apparatus, manifested by dypsnoea, palpitation, dilitation, and various rythmical disturbances. The vasomotor perturbations, shown by coldness, pallow of extremities, and often flushing of surfaces, which he thinks also takes place in internal organs.

Occasional exopthalmus and thyroid enlargement, and Moreiz's exaggerated pulsation of peripheral vessels are sometimes present also a remarkable retention of fat in strange discord with the pallow and prostation; while the urine shows more or less extreme hypozaturia and other evidences of retrograde metamorphosis. The gastric disturbances are expressions of low blood tention, and defective oxidation.

Of the anatomic changes he speaks of the hypoplasia of cardiovascular and genital organs, together with degeneration of circulatory ayparatus as result of defective oxidation.

Two facts have been conceded concerning the administration of iron: First, that it is very valuable in this disease: Second that only the merest fraction of the iron given is absorbed. We have only to examine the faeces to see where the large doses of iron go.

It appears, therefore, that the action of iron is indirect, perhaps bactericidal, or perhaps a chemical or mechanical stimulus to intestinal secretion or motility, and if so this places it in the catagory with other indirect methods, and emphasizes the importance in severe or refactory cases, or those cases where iron disagrees, of either supplanting or supplementing it with other treatment.

He believes that the bone marrow is impaired by functional or structural disease, so that chlorotic blood is morphologically similar to that of overworked bone marrow Such as that formed in the anemia follsw-ing hemorrhage.

The functional integrity of any organ is largely a question of hydrostatics and osmosis, and the bone marrow is no exception, so that while it is obviously inaccessible to direct methods, indirect methods can influence it, and through the medium of the nerves, of which bone marrow is abundantly supplied, and by methods of external stimulation, of which hydrotherapy stands at the head, we can produce, it is fair to assume, the same impression on the invisible rich circulation of the bone marrow

that can be demonstrated in more accessible areas.

By these measures we quicken the circulation and the cellular metamorphoses which lead up to the formation of fully developed erythrocytes and hasten the molecular and chemical changes upon which the formation and intracellular fixation of hemoglobin depends. This explains the beneficient and hydrotherapy has on the functions of hematogenesis. The lowered blood tension, occasionally found, which is an insurmountable obstacle to functional integrity of any organ, is probably overcome more by hydrotherapy than by any other one thing; and in so doing will accomplish as much toward the proper formation of hemoglobin as the administration of iron in however large quantities may be given.

Along with this forced feeding, rational treatment of associated gastro-intestinal atony, regardless of whether it is a cause or effect, rest in bed, combined with exercise in the open air when indicated, properly graduated gymnastics with suitable hydriatic measures, at least in severe and intractabla cases, appear to meet the indications and give prompt and good results.

He uses in nearly all his cases the hot *douche mobile* of the French, which stores up the heat, followed by cold similarily applied, whereby the tonic effects of the cold are obtained without undesirable depression or lowering of tone.

He grades the force of impact according to the physiologic state of the patient, and improves cardiovascular tonicity, stimulates general innervation of all organs, and hastens the restoration of blood of normal state.

Certainly we should be guided in this, as well as in any other disease of lowered vitality by the result; unless the result of the impact of cold is an elevation and not depression of body heat, it may be definitely stated that it is doing harm rather than good. In such case milder methods are resorted to.

The Drug Habit: Its Causes and Restriction.

As presented in an essay by Dr. J. M. Aikin of Omaha, publieshed in the Western Medical Review and the Medical News, makes clear the responsibility upon physicians both as to its cause and restriction. He cites the advance in chemical science and the progress in pharmaceutical preparations as a source of danger. The variety of elegantly prepared compounds is so great, their administration so easy, and their proximate results so brilliant, that remote conditions in the patient are too often not considered. He calls upon the physician to cease making ignoble the noblest profession of all by subordinating his practice to the dictates of commercialism.

Special attention is called to the fact that the general public is, in a large measure, influenced in their use of drugs by the physicians' personal and professional application of them. He commends wholesome legislation as desirable for restaining the vicious and protecting the innocent, but maintains that the man in medicine can never be placed there by legislation.

Education is demanded and the standard of intellectual culture should be raised; but this aloee will not suffice. "If we would raise to the opportunities of our profession we must daily live the life, exhort the precept, and practice the truth, which we, as medical men, know concerning drugs and the utility, for liberating, rather than enslaving human beings."

Should We Burn Our Dead?

The disposition of the dead in the most rational and scientific manner, and for the best interests of the living, is becoming one of the important sanitary questions of the times. In an article in American Medicine, by Henry D. Fulton, we gleam some interesting matter. If incineration in time becomes the general custom, it will be but a return to old methods. From time immemorial the Hebrews practiced inhumation. This method was adopted by the natives of Europh soon after the commencement of the Christian era. The fact that dead bodies buried in the earth may become a source of actual danger to the living is strengthened of late years by our better bacteriologic knowledge. It is fairly demonstrated that in locations where there exist bad drainage, collections of decomposing animal and vegetable matter, and accumulations of filth of various kinds, infectious germs find a home or element favorable to their rapid multiplication and a greater degree of virulence. The most disastrous epidemics of typhoid fever, diphtheria, yellow fever and Asiatic cholera occur when these conditions are present. These deadly maladies, as we well know, require certain conditions for their propegation, as a seed germinates by the aid of such elements as earth and moisture, and as a flower unfolds in the air and sunshine.

The time has probably passed when argument is needed to support the assertion that burial is an unsanitary method of disposing of the dead. There are few, perhaps, except of dull imagination, whose reveries in a graveyard are not more or less disagreea-

ble, from the very thought of the existing condition of those beneath the sod. Cremation offers a plan for doing in a brief time exactly what nature does in a long period. Incineration speedly reduces the body to a few pounds of pure inorganic matter. For one whose mind is free from prejudice, to reflect that incineration robs putrefaction of its prey; that the handful of white ashes that is incinered will never be molested by the worm or touched by the breath of corruption, its advantages, aside from the questions of sanitation, must be apparent. There is one serious objection to incineration and that is, it might destroy evidences of crime. A chief drawback to a more speedy adoption of cremation is the force of long-established custom. From an economic standpoint the immense saving that incineration of the dead would make possible over our present display and expensive custom of burial is of great importance. In Pittsburg the cost of cremating an adult is $40.00; a child $20.00. We may confidently hope that its general adoption may be a part of the progress of this enlightened age.

Carbonate of Creosote as a Remedy for Pneumonia, with a Report of Nine Cases in which the Administration of it has been Followed by Remarkably Uniform and Good Results.

Lenoard Weber, M.D., (New York Medical Record Nov. 2, 1901):

After reading the "Resume" published by Dr. I. L. Van Zandt, of Ft. Worth, Texas, in the New York Medical Record, March 30th, 1901, Dr. Weber proceeded to administer carbonate of creosote (Creosotal) in six hospital cases and three private cases—all adults—of pneumonia and pleuropneumonia, in the following manner:

Carbonate of Creosote 1-2 oz.
Sapon medicat. 1 dr.
M. F. Capsulæ 60.

Two to be taken every three hours, 10 to 12 capsules daily. After 24 hours' treatment in this way, with the exclusion of all other remedies, local or general, temperature and pulse came down almost to normal and the patient rested easy. The drug being continued in this manner for five or six days, the patients appeared to be comfortable right along, never objected to it, nor had any unpleasant symptoms from it, took food with a relish and slept fairly well. With the beginning of the second week, generally, resolution would set in and the affected lung clear up by lysis.

All his patients recovered except one hospital case, who did not succumbe to pneumonia, but died of liver and heart complications, after the affected lung had returned to almost normal condition.

It must be conceded, he believes, that neither to the antipyretic nor bactercidal qualities of creosote is to be accorded this remarkable and beneficial influence upon pneumonia, and so far as his experience goes, never accompanied by any symptoms of depression or disturbance of the gastro-intestinal tract. It is reasonable to say that its action must be antitdotal to the pneumonic toxins. None of the cases received any other remedy while the illness lasted, except a small dose of Dover's powder for controlling restlessness. All of the hospital cases were more or less advanced when admitted, except one. None were promising so far as the patient's condition and general antecedents were concerned. Indeed, he thought that as cases go their chances of recovery were by no means good. Yet they all recovered with the exception of one. No sooner were the patients under the influence of creosotal than all further anxiety about them appeared to be unnecessary. He visited and examined them twice daily, saw to it that his directions as to nursing and feeding and the exact dosing of creosotal were properly carried out, and had the satisfaction of seeing the patients through the illness without resorting to the usual array of hypodermatic remedies.

It may be urged that, pneumonia being a self-limited disease, even bad cases will recover; so they do, as we all know; but then good and uncomplicated cases die in spite of the best care and the so-called symptomatic treatment because the system does not furnish a sufficiency of serum antitoxins to end the pneumonic process. Unfortunately, we are not in a position to tell in any case of pneumonia whether Nature will be able to do the one thing needful and cure the patient. We must go on, therefore, trying to find a remedy on which we can rely in helping Nature's efforts. These cases and many observed by others have shown, he believes, that creosotal is such a remedy, working in a very similar way to the antitoxins furnished by the system. He would, of course, be delighted to furnish many more positive observations than he has done here. Others, however, have seen and recorded equally good results before him, and being quite in accord with them, he is anxious to bring these clinical records to the knowledge of the profession, hoping that the remedy may be given a fair trial by many during the coming winter, and that the results obtained may be as favorable as his own.

Intestinal Obstruction.

As illustrating certain phases of intestinal obstruction the writer gives the history of thirteen case which may be summarized as follows:

Obstruction from gall-stones, 1 case.
Obstruction from Volvulus 2 cases.
Obstruction from Meckel's diverticulum, 1 case.
Obstruction from Inflamatory band, 3 cases.
Obstruction from intussception, 2 cases.
Obstruction from Fecal impaction, 1 case.
Obstruction from Strangulated Hernia, 1 case.
Obstruction from Kinking from Inflammation, 1 case.
Obstruction from Cancer of Sigmoid, 1 case.

Of the local cases operated on 7 or 70% died; 3 or 30% recovered. Not very encouraging, it is true, yet if we divide them somewhat more carefully a better showing presents itself. Of the 7 fatal cases, 4 were distinctly in collapse, while the remaining 3 were exhausted by long delay, but still had a slight chance for operative recovery. Eliminating the four cases in absolute collapse, we find that of 6 cases in which there was some chance of success, 3 lived and 3 died, raising the average of recovery to 50%, which is not a very bad percentage of recovery when we consider the condition to which the patient is often reduced before opeaation is submitted to One fact forcibly impresses the writer in reviewing the cases and that is that notwithstanding the difficulty often encountered in making the diagnosis, how easily was the seat of obstruction discovered upon operation and how quickly and simply was it possible to relieve the obstruction, so that he has no hesitation in saying that beyond any reasonable question at least 5 out of the 7 fatal cases might have been saved by early oporation. This is not said at random but with a clear conception of the difficul ties involved and a positive belief that they could have been easily overcome. This would have reversed the percentage, and made the recovery 80% with deaths 20% and even this he considers a high rate of mortality were the diagnosis made early and an operation permitted. Of the two cases not operated on, one, the strangulated hernia, died, the other, the fecal impaction recovered. The writer only mentions the first as one of a group of cases which so uniformly end in death if not relieved and in which a prompt operation most as uniformly ends in recovery.

In genuine cases of intestinal obstruction the prospect of spontaneous relies is so slight that it may be disregarded in considering the question of treatment. We should all realize that the majority of patients with intestinal obstruction do not die simply from the strangulation and local gangrene or ulceration, but that there comes on a venous stasis, and possibly an ecchymosis may extend into the mucous membrane thus impairing its nutrition. The protection afforded by the mucous epithelium being lost, the avenue of entrance for bacteria and their toxic products is at once opened up, and the patients dies from general intoxication with circulatory weakness and collpase, or from local intoxication with necrosis going on to ulceration and perforation. It is evident that we cannot have peritonitis without micro-organisms, and they only tend to escape from the intestinal canal when nutrition is impaired.

Regarding some of the more prominent symptoms of obstruction the writer calls attention to the inability to localize the seat of obstruction by the presence of pain and states that much more reliance shonld be placed upon localized tenderness. Constipation is not always present from the start as when the obstruction is high up, diarrhœe may be present for a day or two. No reliance should be placed on fever as a symptom of obstruction it is due to other causes. Stercoraceous vomiting is justly regarded as of the very highest value as a positive symptom but in a large percentage of cases its advent denotes a stage when operative treatment is going to be too late; vomiting of fecal matter implies a stricture in the lower part of the ileum or in the colon.

Callapse is a symptom of greatest importance and nearly always foretells a fatal outcome. It is in this stage that an operation is most often sought by the patient or his friends.

As to prognosis it is to be remembered that in genuine cases of slight that it may practically be disregarded in considering the question of treatment and the writer is personally convinced that when the diagnosis is made there is but one rational thing to do, and that is to remove the local obstruction, such as an impaction of feces in the rectum when possible and in all other cases to operate. It is the chief object of the paper to protest against delay, to emphatically disconuntenance temporizing in the face of danger and almost certain death, and to speak for the earliest possible diag-

*Abstract of a paper by F. E. Bunts, M. D., Prof. Prin. Surg. and Clin..Surg., Western Reserve University, Cleveland, O.

nosis and the almost certain prospect of relief which an operation gives us. It is not sufficient to agree that some cases get well without operation, it is an absolute fact that nearly all die unless operated on,and it is unfortunately also true that at present the stactistics of operative results are extremly bad from the standpoint of numbers rescued but considering the desperate condition they are too often in when brought to operation the results are all that could be expected and it rests with us both physicians and surgeons to relieve this class of cases from the opprobrium which surrounds their treatment.

Retrodeviation of the Womb.

Rosenwasser, in the American Journal of Abstetrics, draw these conclusions:

1. A retroverted womb uncomplicated by disease should be replaced and supported by a pessary.

2. Retroversion complicated by diseased womb or impaired pelvic floor, the womb being movable, requires preliminary plastic operation to restore the normal condition before using a mechanical support.

3. Suspension operations should not be done simultaneously with the plastic, in face of the probability that a pessary can sustain the womb in position.

4. Retroversion complicated by aggavated prolapsus requires simultaneous plastic and suspension operations to effect a cure.

5. The treatment of retroversion with fixed womb is that for pelvic inflammation. Whenever the later requires lapatomy or colpotomy, the retroversion becomes subject to such surgical treatment as may appear best suited to the particular case.

6. Retroversion, simple or complicated. in which mechanical support and plastic operation have failed to cure or to relieve, and in which the symptoms demand relief, constitutes a proper indication for suspension operation.

On the use and the Abuse of Nasal Sprays.

Nasal sprays when propely used are beneficial, when injudiciously used they are harmful.

In using sprays one fact should always be kept in mind. All substances placed in contact with the nasal cavities are irritating in various degrees, depending upon the character of the substance used and its mode of application. Dunbar Roy gives us some good advice on this subject in the Atlanta Journal—Record of Medicine. He says sprays are used principly for three purposes, (1) for cleansing purposes; (2) for stimulating qualities; (3) for its soothing affect upon the mucous membrane. He further states that the abuse of the spray consists in: (1) the medicenial substance used: (2) the pregnency of its use; (3) the force of the spray. These are important facts to note. One common error practiced by many physicians is the indiscriminate use of the spray without due reference to its suitability to the given case. If your spray machine is pumped up and the receptacle is filled with a spray solution and the patient comes in he usaully gets the dose. This method is harmful both to the patient and the physician, though I mus say it is quite common. Another great abuse to the spray is the frequency of its use. He speaks of this as the "spray habit" and he attributes this partly to the oily methol spray. Admitting that the methol spray is a valuable nasal therapeutic remedy yet the harm it has done to nasal mucous membranes far outweighs the good.

The third abuse of the spray he mentions is the force used. A force of fifteen pounds is quite sufficient. A force greater than twenty pounds always causes an abrasion of the mucous membrane, of course much harm results. The use of a solution of cocain as a spray he condemns most bitterly. Whers cocaine is indicated it is best applied by means of cotton on the end of an applicator, thus limiting its action to the desired portion.

Rational Treatment of Constipation.

Constipation is one of the most common disorders met with by the physician.

Often its remote symptoms are not recognized. It is said that nine-tenths of the headaches are caused by intestinal intoxication and the only safe treatment is to expunge all putrid fermentation from the intestinal canal. J. R. Leadsworth writing in the St. Paul Medical Journal is of the opinion that drug medication in this condition is not to be relied upon. Concerning their use Dr. D. E. Hughes in his practice of mediciae says: "They are to be used with caution, their reckless administration often doing more harm than good."

Drastic purgatives, such as aloes, rhubarb, prodophillin, cascara, and the like, not only depressed the secretory power of the stomach and weakened the tone of its mucle walls, but in addition, exerted a congesting effect upon the mucosa. He says the contra-indications for the use of salines and vegetable cathartics were: (1) All the conditions characterized by diminished secretory power; (2) all the conditions of impared muscular power of the stomach and intestines; (3) all the conditions on inflammation of the stomach or of the large or small intestines, and (4) in children,

owing to the proneness in them to inflammation of the intestinal mucosa.

If the patient's habits have been sedentary he should take exercise. Horseback and bicycle riding are useful in this disease. Kneading is also higly recommended.

Many cases having been reported cured by this means alone. The abundant use of fruit is a most excellent remedy. Oranges, apples, figs, prunes etc., are highly recommended. The graduated enema has proven highly beneficial.

The eneoma should be given as follows: beginning with three pints of water at a temperature about that of the body, the amount of warm water iutroduced each day is diminished by half pint, one fourth pint of cold water being added, making the total amount of the fluid one fourth pint less each day. At the end of the twelfth day the enema consists of four ounces of cold water. The graduated enema is exceedingly useful as a means of overcoming the enema habit. One or two glasses of cold water half an hour before breakfast will often act as a panacea for chronic inactivity of the bowels. This is a simple remedy but many cases have been cured by its use.

The Requirements of Modern Surgery.

Fifty years ago the surgical operations performed were principally amputations of limbs and operations for hernia and stone, but with the discovery of chloroform and either and the resulting painlessness of operations, more surgery was practiced. Modern aseptic surgery however, has only been practiced for the last ten years. J. H. Carstens in Journal of the American Medical Association has a good long article on this subjeet and he closes it in these terse words. The requirements of modern surgery are:

A patient brought to the highest state of resistance to microbic infection and made as clean as possible.

An operating-room, preferbly in a hospital, where everything has been made thoroughly sterile. This includes anesthetizer, assistants and nurses.

A surgeon who has a mechanical hand and has received a long, thorough training.

The Treatment of Hemiplegia.

L. G. Guthrie summarizes in Medical Record, the principles of treatment in the following propositions: 1. Neglect and want of treatment aggravate severe and retard the recovery of mild, cases. 2. The evils to be foreseen and guarded against are articular adhesions, late rigidity, and muscular atrophy. 3. Articular adhesions should be prevented by passive movements of each joint from the very first. 4. Faulty positions of the limbs shond be constantly corrected, or they will become chronic. 5. Contraction of muscles should be treated by endeavors to improve the nutrition of their weaker opponents. 6. Massage, passive movements, and, to a less extent, electricity should be used with this object. These agents not only counteract muscular atrophy from disuse, but probably take the place of normal stimuli and invigorate the neurons. 7. The recovery of mild cases may be often hastended by re-education of movements. Want of re-education frequently prevents recovery. 8. Re-education consists in a combination of passive and active exercises. 9. Movements should be first encouraged in those parts which naturally tend to recover first. 10. Incoördination and general weakness of limbs which have yet regained power of movement should be treated by exercises and mechanical therapeuotics. 11. It is important to find out what the patient can do, and to make him do it. In conclusion, this paper deals with the treatment of hemiplegia as a condition without reference to its cause, for whether the cause be hæmorrhage or occlusion of cerebral vessels by embolism or thrbosis is immaterial. The principles of treatment will be the same and need not interefere with other measures taken for the relief of the disease which give rise to the hemiplegia.

The Treatment of Pneumonia.

De Lancey Rocheister in Journal of the American Medical Association says:

The first aim in the treatment of this disease is to get rid of toxins. The natural avenues of excretion by which toxins may be carried off are the respiratory, the renal, gastro-intestinal and the cutaneous. The treatment of pneumonia by the pneumococcus antitoxin is the natural and rational plan from the recognition of the infections nature of the disease, but so far the attempts to produce a reliable antititoxin serum that will preserve its antitoxic powers have not been entirely successful, and consequently there are very great variations in the reports as to the results obtained by its use.

Improvements in this line are constantly being made and no doubt pneumonia will be put in the same category with diphtheria. Until that time comes however, we will get our best results by recognizing the essentially toxic nature of the disease, and treating it along the eliminative supporting line here suggested by the writer briefly summarized as follows:

1. The sustaining of the metabolic processes of the individual by the administration of easily digested or predigested foods in small quantities at stated intervals, the administration of large amounts of pure water for eliminative purposes and the administration of oxygen gas by inhalation whenever the absorbing surface of the pulmonary mucosa is involved to such extent as to interfere with proper metabolic oxygenation.

2. Elimination, (*a*) by the liver and bowel through the vigorous use of calomel and salts: (*b*) by the skin through sweats induced by external heat: (*c*) through withdrawal of blood when indicated by right heart distension.

Stimulation of heart by strychnin, alcohol or ammonium carbonate, and in suitable cases by the subcutaneous injection of normal salt solutson.

The local treatment of the lung by leeching, wet cupping or dry cupping as indicated.

Tuberculosis of the Peritoneum.

Wallace Neff, (American Journal of Surgery and Gynecology.)

There is no more remarkable fact known to surgeons them that a simple abdominal section will cure a large proportion of cases of tubercular peritonitis. From a resume of the literature on this subject we may draw the following conclusions:

(1) Tubercular peritonitis is a surgical disease, and should be treated surgically, and not medically, for the simple reason that when treated medically patients die, but when treated surgically a cure is effected in a large proportion of cases, and a marked improvement follows in all.

(2) The proper treatment is abdominal section rapidly and carefully performed.

(3) Danger from operation is very slight the mortality being less than three per cent.

(4) Of the many theories advanced to account for the cure in these cases, the antitoxin theory of Gatti seems to be the most rational. It is not unlikely, however, that the good results attained are due to a combination of several of the various causes assigned.

(5) Sepsis is not apt to occur on account of the pathological changes that have taken place in the peritoneum.

(6) Tuberculous infection of the wound does not occur.

(7) Antiseptics are useless, and drainage should not be employed if it can be avoided as it is apt to leave a permanent fistula.

(8) Most of the deaths after the operation have been due to a general tuberculosis or tuberculosis of some other organ.

(9) The successful treatment of this disease depends upon the diagnostic ability, good judgement, technic, and skill of the man behind the knife.

Heart Disease.

A. James in his article in Philadelphia Medical Journal, on a clinical lecture on a case of heart disease, gives his experience in the use of digitalis and strophanthus: (1) In the compensation failure of aortic regurgitation, and arterial sclerosis and chronic Bright's disease, he usually begins with strophanthus; but if this does not seem to be having a distinctly good effect, he has no hesitation in turning to digitalis. In either case he ordinarily combines those drugs with liq. trinitrinæ, or potassium iodide, as being likely to ward off high tension effects. In other valvular lesions and in fatty heart cases, he begins with digitalis; but he has no hesitation in changing to strophanthus, if the effects of digitalis are not satisfactory; (2) When the valve leison has been due to acute endocarditic processes he inclines to digitalis: when, on the other hand, it has been due to slow atheromatous changes, he inclines to strophanthus. As a rule, therefore, he begins with digitalis in the young, with strophanthus in the old; (3) When with symptoms of compensation failure the heart's action is rapid, he inclines to digitals; when it is not rapid or slow, he inclines to strophanthus. Two question may be asked—first, how long may those drugs be continued; and, second how do we know if the patient is getting an over-dose? Fist, as to how long they may be continued with advantage. Here must be rembered the common but rarher unphilosophical assertion, that digitalis is cumulative and strophanthus is not. Beyond observing that in nature, with all poisons, as with all nerve irritants, a somewhat cumulative or summating effect can be discerned, the author does not further refer to the pros and cons of this assertion as regards dsgitalis, because in the doses, in which we employ it for prolonged periods, the risks of any evil cumulative effect are slight. Balfour states that half a liquid ounce of the infusion, or ten minims of the tincture, may be safely administered to an adult every twelve hours without fear of cumulative action, and there is no doubt that patients have taken doses for months, or even years, with advantage, and similarly with strophanthus in corresponding doses. It is, of course, different when large doses are being employed, as for example, when for a few days, in an urgent heart cases, fif-

teen or twenty minims of the digitalis tincture are given every few hours. This leads, however, to the other question, viz., how do we know if the patient is getting too much of the drug? The main indication of this are believed to be dimnution in the quantity of urine, increasing rapidity and irregularity of the pulse, sickness and nausea.

What are the Qualificatoins Necessary for Success in the Practice of Medicine?

Frank Billings in Medicine says that, the qualifications for success, in any walk of life, will depend in a measure upon the meaning of the word success.

Not uncommonly success in life means to the majority of mankind the acquisition of wealth. The doctor who is fortunate enough to posess a handsome income is frequently not given credit for the qualities which enable him to be thus far successful. True, a strong personality, in a proper inviror-ment, may be supported by gross ignorance and still the individual acquire a big and lucrative practice. On the other hand, enviable knowledge, fine culture, and much practical experience in even good surroundings, when borne by a weak personality, may find but little financial reward.

A strong personality when unsupported by knowledge will invariably give but temporary success.

Ignorance will surely be discovered, you cannot fool all the people all the time in medicine.

In one sense a good income is necessry to success.

Without a living income, life is too full of anxieties to allow one to do good work.

There is a saying that success brings success, and just as surely may one say poverty begets poverty.

Dr. George F. Shrady has estimated the average annual income of medical men in cities at $2,000, and in small towns or villages at about $,1200 to $1,500. Sir Astley Cooper is said to have had an income of $100,000 from his practice. The late William Pepper is said to have enjoyed $60,000 annually from his work. Our overcrowed profession will limit the success of all. There are other qulifications necessary to success in medicine, qualifications which are more important than money, and without which money is a negative. One of the fundamental qualities is a proper education. To-day the problems in medicine are so profound that a good preliminary education is necessary to enable the student to pursue the studyof medicine rationally and successfully, The personal equation is important, honesty, straightforwardness, sobriety, and a thorough appreciation of rights of our fellowmen are important elements, which, when absent, count against one in the battle of life. It is a fundamental law in medicine that a doctor's reputation and rank in the world is fixed by his medical brethern. The reputation one may gain the lay community is at best but temporary it is not supported by the respected of the medical profession. The successful doctor must be industrious, energetic, thorough, painstaking, and methodical in all he does. His student life continues as long as he practices medicine.

The doctor must learn commercial business methods in reference to accuracy in keeping the accounts of his patients, and if he would be as prompt as his butcher, grocer, and tailor in sending the accounts for liquidation, he would be not a whit less ethical, and, on the other hand, would have prompt payment of his just due.

Give the patient your best efforts with sole purpose of relieving him and without thought of the fee. But when the service has been rendered be as energetic to secure your fees as you were to relieve the patient's suffering. A layman's gratitude for suffering relieved is in inverse ratio to the time his account runs. In sufficient time a layman may so far forget past suffering as to feel injured that the doctor should present an account at all.

Modern Treatment of Tuberculodermata.

Noah E. Aronstam, M. D., Ph. G., in an article entitled "Modern treatment of Tuberculodermata," published in the October issue of the Journal of Tuberculosis, attributes a great number of skin diseases to the action of the tubercle bacillus. The dermatoses belonging to the domain of the latter are lichen, eczema, scorfuloderma lupus, leprosy and ecthyma. To prove the correctness or at least the feasibility of this assumption, he offers the following points as criteria.

(*a*) Lupus is *always* due to the bacillus tuberculosis.

(*b*) Scorfuloderma and eczema, especially the infantile variety, are in many instances attenuated forms of a general tuberculous dyscrasia: the bacillus tuberculosis and other microorganisms have at times been detected in the miltiple and manifold lesions, as well as in the exudative and serous products of these affections.

(*c*) The tubercle bacillus has a striking resemblance to the bacillus of lepsosy and,

(*d*) Ecthyma and lichen are the results of a mixed infection in which tubercle bacilli have been found.

To argue therefore, from the above, it

would seem that the diseases enumerated are akin to one another, at any rate, have a common origin. Further research will reveal in how far the above affections are related to one another and determine beyond doubt that their exact nature and primary cause is nothing else but tuberculous, and that *the majority of dermatoses are of a tuberculous nature.*

The treatment of these affections may conveniently be studied under the following four headings:

(*a*) Prophylactic Treatment.
(*b*) Dietetic and Hygienic Treatment.
(*c*) Mechanic or Docal Treatment.
(*d*) Constitutional or General Treatment.

Prophylatic Treatment.—Every physician and dermatologist should report cases of tuberculodermata, especially those six enumerated, to the local health authorities. Immediate segregation of those suffering from leprosy and lupus should be carried to the fullest extent. Scorfuloderma, eczema, ecthyma and lichen should receive efficient and prompt disinfection without isolation.

Dietetic and Hygienic Treatment.—Patients suffering from tuberculodermata are usually of a depraved physique ana their vitality and power of resistence to other inter-current affections are below the normal. As a general rule the amount of carbohydrates should be restricted: pickled articles should be absolutely ommitted from the diet. Milk, buttermilk or kumyss alternated with eggs and meat (that of young fibre preferably) are very wholesome and nutrious. If the digestive function is intact, fats merit the most prominent places as articles of diet in all tuberculous affections, and their consumption should be encouraged. It should be borne in mind that alcohalic beverages and malt liquors in any form are injurious and contraindicated in the tuberculous diseases of the skin. If given at all, they should be given very sparingly.

Proper appearel to suit the demands of the season and weather must be worn. Outdoor exercises is very beneficial: so is plenty of sunshine, or as Osler says, "*the maximum amount of sunshine.*"

Mechanic or Local Treatmənt.—This embraces the most important and efficacious mode of treatment. The discovery of the *Roentgen and the Antinic or Finsan's* rays has met with favor by all eminent dermatologists and hailed as a new era of rational and effective therapeutic procedure. They are now being employed exclusively at the expense of the so called antiseptic agents. Painstaking efforts sholud be made to have the diseased surface properly and thoroughly exposed to the penetrating action of the rays, lest the result be evanescent and far from satisfactory. Two exposures weekly for a time, suffice as initiatvies, after which the sittings may take place more often.

Local antiseptic medication should not be altogether slighted or discarded. as it forms a valuable adjuvant to the ray treatment. Ointments or lotions of mercuric bi-chlorid, 1 in 8,000 or 10,000, or the ointment of hydrarg. ammon., of 5 per cent., strength: iodoform or iodin in ointment or solution: phenol in the same form: hydrogen dioxid, ichthyol, *ethyl chloride*, salicylic and benzoic acids in any covenient form: cinnamic acid or the essential oil of cassia in alcholic solution or ointment, or a combination of several of these remedies, are important auxiliaries. The actual cautery, curettements and cauterization of the lesion with the various escharotics, notably caustic soda and potash, argentic nitrate or chromic acid should never be undertaken, The loss of tissue incurred by their employment, the deformity following and the pain accompanying their application does not warrant their introduction as routine measures. As long as we possess the *X Rays and Finsen's light*, we should keep ourselves at a distance and aloof from the application of these destructive means.

Recently, the fluid extract of ergot, or ergotin, with the extract of the suprarenal gland, injected into and at the margin of the lesion, has been practiced by French dermatologists in cases of lupus and the results obtained are indeed very satisfactory. It is very probable, that the active principle of the gland—*adrenalin*—may have something to do with the neutralizaton and destruction of the morbid material.

Topical injections and applications of tuberculin or the aqueous extract of tubercle bacilli, have of late been tried in Germany. Whatever mode of treatment may be adopted, the paramount utility of the ray treatment should ever be borne in mind in all cases of tuberculodermata.

Constitutional or General Treatment.—Constitutional treatment is employed with a view to aid assimilation and promote nutrition, thereby rendering the tissues less susceptible and lowering their vulnerability to further bacillary attacks.

The following constitutional remedies are of value in the treatment of the tuberculides: Cod liver oil, the hypophosphites, malt, creosote, arsenic, iodin and the subcutaneous injections of tuberculin or the aqueous extract of the tubcrcle bacillus.

Cod liver oil is of undoubted efficiency in improving the nutrition and tone of the body. It shoud be given in small does at

the start, in order to accustom the stomach to it. In infantile eczema and scorfulodermata it acts almost as a specific. If the oil can not be well borne cream may be substituted for it. The oil should always be administered in the form of an emulsion aloneor in conjunction with the hypophosphites and iron iodid.

Malt with cod liver oil is a valuabe combination, especially in persons of perverted intestinal digestive function.

Next to cod liver oil in point of efficiency stand the hypophosphites. They are but tonics and exert no antiseptic action whatsoever upon the tuberculous formations, as has been supposed heretofore.

The syrup hypophoshite compound, containing the hypophosphites of lime, soda, potash and iron, is a pleasant form in which the exhibit them.

Next in order are the various preparations of malt or maltine, either alone or in combination with the iodides, hypophosphites, cod liver oil, creasote etc.

Creosote is the next drug demanding our attention. It is best administered in capsules beginning with one minim three times a day and increasing the dose gradually until eight or ten minims are taken. If not well borne it should be immediately discontinued.

Creosote in a vehicle of almond oil may be also injected into the tuberculides or painted upon eruption.

Gnaiacol, or morrhuol cresote may be given as a substitute for creosote. They are constitutional antiseptics, exerting a beneficial influence over the local lesions and augmenting the process of repair.

Arsenic is a valuable tonic alterative in the chronic form of tuberculosis skin affections. It has a selective action upon epithelial structures, especially upon cutaneous epithelium, exercising a stimulating and reconstructive metamorphosis upon the epidermis.

Finally, the hypodermic treatment of the tuberculodermata with tuberculin and the aqueous extract of tubercle bacilli should be given a thorough trial.

In conclusion, the author wishes to emphasize the fact that the various tuberculides are merely a local indication of a general tuberculous dyscrasia, or a cutaneous manifestation of the undermining destructive, imperling and ravaging action of the tubercle bacilli, which may insidiously break the barricade established by our friends, the phagoeytes, which may at any time favor the entrance of a pulmonary, meningeal, or peritoneal tuberculosis.

The Treatment of Syphilis, With Special Reference to the Best Methods of Administering Mercury.

Winfield Ayers, M. D., (The London Lancet, Oct. 19 1901).

The author calls to mind the facts that mercury has been used in the treatment of syphilis for over 400 years, and there are few physicians, to-day, who do not use it in some form. Although the method of treatment with mercury is still discussed, he is firmly of the opinion that there is no hope of eradicating the disease unless the full dose is given constantly for something like three years The treatment should begin just as soon as the diagnosis can be made. There is no ground for supposing that enucleation of the chancre has the effect of aborting the disease. If a positive diagnosis cannot be made from the appearance of the initial lesion, general tonic treatment should be instituted.

In some cases the protiodide controls the symptoms, but in the majority is of very little use. Experiments with Mercurol were conducted at Bellevue Hospital, for eight and a half months, with 180 cases; the histories of 95 of these are recorded. The remainder could not be kept under observation and are therefore passed over. The dosage of the Mercurol, regulated either by reaching the point of tolerance or control of the disease, varied from one half to six grains. In 64 of the 95 cases the disease was controlled as folls: In two weeks, 8; three weeks 12; four weeks 14; five weeds, 6; six weeks, 5; seven weeks, 2; two months, 8; ten weeks, 2; three months, 5; and four months, 1. The remainder are marked thus; decidedly improved, 17; improved 7; no improvement in two weeks, 3; no improvement in four weeks, 1; and no improvement three months, 2. The latter were all dispensary patients and it is uncertain whether they took their medicine regularly.

The writer states that his plan was to increase the dose steadily from one grain until the symptoms were controlled, or until there was a slight tendency on the part of the teeth and gums to become tender. If the symptoms were not controlled before the physiological effect of the Mercurol made itself felt, small doses of potassium iodide were added, and in every case where the Mercurol was taken according to directions, with the exceptions noted above, the symptoms were controlled.

In 67 out of the 95 cases tabulated, no other medicine than Mercurol was given. In 15 out of the remaining 28, the addition of iodide of potassium was found to be sufficient to control the disease, while in 6

others the addition of an iron tonic sufficed for this purpose.

The cases are not reported at length, but a few of the more remarkable results and some cases in which other medicines failed to control the disease are briefly mentioned.

Case 1 had been taking bichloride for one month with very little improvement. Under Mercurol, three grains maximum dosage, the symptoms were under control in five weeks.

Case 2 had been under biniodide of mercury (one-sixteenth of a grain) and potassium iodide (five grains), which caused iodism. His symptoms were controlled in one month under half a grain of Mercurol.

In case 3 unguentum hydragyri had failed to control the disease. The patient was put on Mercurol and the dosage pushed up to six grains three times a day. The disease was thoroughly under control in seven weeks.

Case 4 had been on three-eighths of a grain of biniodide of mercury and twenty grains of potassium iodide for two months. The medicine cause nausea and vomiting. Having been put on Mercurol and the dosage gradaally increased to five grains three times a day, the symptoms were controlled in three weeks.

Case 5 had been taking hydrargyrum bichloride (one-twelfth of a grain) three times a day, under which an eruption on his face had faded, but the eruption on his body still persisted. His symptoms disappeared in two weeks under a maximum dose of three grains of Mercurol three times a day.

Case 6 had been on bichloride of mercury (three-sixteenths of a grain) for three months, in spite of which he had palmar syphilide of an eczematous variety. All appearance of the disease disappeared after he had been one month on Mercurol, his maximum dose being three grains three times a day.

Case 7 had been taking one-quarter of a grain of Mercurol and fifteen grains of potassium iodide, with the result that the eruption had decidedly improved, though not to the extent that it should have done. There were thickened red patches on the face, covered with scaly eruptions. The symptoms almost entirely disappeared within three weeks under a maximum dosage of five grains of Mercurol three times a day and fifteen grains of potassium iodide.

Case 8 had been treated with inunctions of mercury, under which the eruption disappeared, but the pains in the bones still persisted. He was relieved in three weeks under a maximum dosage of four grains of Mercural three times a day.

Case 9 had been taking other forms of mercury for six months. The form which had done him most good was bichloride. Yet one-fifth of a grain did not entirely control the disease. He had been taking that for two months when he was placed on Mercurol. The dosage in his case was pushed up to six grains three times a day, and at the end of seven weeks all symptoms had disappeared.

Case 10 had been taking medicine off and on for two years, but his symptoms never diappeared entirely. After being two weeks on Mercurol (two grains three times a day) with the addition of potassium iodide, all symptoms had disappeared.

Ayres, in conclusion, states that he uses Mercurol in his private practice to the exclusion of all other drugs. His experience is that he gets better results. He has found no form in which mercury can be given with such good results as in that of Mercurol.

Intestinal Suture all Knots Inside.

Dr. F. Gregory Connell (Journal American Medical Association. Oct. 12, 1901), in his paper on "Intestinal Suture all knots inside" reviews the gradual involution of the knot and the varying opinions prevalent at different times relative to the number of coats,or amount of bowel wall to be included in the stitch.

He points out the history of the knot as: 1, outside of abdominal wall, artificial anus; 2, outside of the intestinal wall, anchored to the abdominal wall; 3, outside of the intertinal wall, in the free peritoneal cavity; 4, outside the intestinal wall, buried between the opposed serous surfaces, and 5, inside of the intestinal wall, on the mucosa.

He calls attention to the vauge inaccuracy of the definition of the "Lember-stitch." How, to one it may mean but the penetration of the peritoneum only; while to another it means the penetration of both the serous and muscular coats, and yet to another it means that the sub-mucosa also sohuld be included in its bite.

Bruner's glands; as factors with possibilities for evil, are considered, and the difficulty if not impossiblity of penetrating the sub-mucous coat where these glands are located, without, at the same entering one of them is made apparent.

He says that the importance to the modern surgeon of the sub-mucous cot was first brought out by the elder Gross who, while yet in Louisville Ky., and as far back as 1843 emphasized its surgical signifinance

when he said: "Hence, if in sewing up a wounded intestine, the ligature be merely carried through the serous investment it will be almost certain to be tourn out. Lying beneath this muscular plane, is the *fibrous lamella*, strong and resisting it is semi-transparent and devoid of elasticity. It readily reunites when divided as I have witnessed in numerous experiments, and deserves to be attentively studied, as it is the membrane *through* which the surgeon should always carry his needle in sewing up wounds of the entestine."

Dr. Connell emphasizes the relative thickness of the sub-mucosa and the needle: and dwells, in a convincing maner, upon the difficulty to be met by the average surgeon, in an attempt to split the sub-mucosa, —which 1-250 of an inch thick, with a needle that is 1-40 of an inch in diameter,— each time that a stitch is taken.

He gives as advantages, in the stitch which includes all coats and has its knot on the serosa:

1. Less danger of peritonitis, through leakage at stitch hole.
2. No yielding of stitch.
3. Adhesions diminished.
4. Small diaphragm.
5. Less danger of gangrne.
6. No foreign body; suture matcrial will all pass away.
7. Time decreased.

He refers to Clumski who states that in all cases of union by suture alone in whice leakage occured, the seat of the leakage was at the site of the knot.

That yielding of stitches, from this or other causes, is one of the most frequent factors in failure of enterorrhaphy can be seen from the statistics of Rosenthal, who, in 1892 collected 151 cases of intestinal resection followed by end to end union, with a mortality of 42. 3 per cent. and 50 per cent. of this rate due to peritontis.

He summarizes in the following conclusions:

1. Yielding and leakage are the most frequent causes of failure in enterorrhaphy.
2. To include all coats of the bowel wall, removes the danger of stitch-yielding.
3. To place the knot within the lumen, diminishes the danger of capillarity.
4. The square-loop stitch is more reliable than the circular-loop stitch of Mannsell.
5. The relative thickness of the needle, and the sub-mucosa, surrounds the procedure of penetration without perforation with great uncertanty.
6. To fail to include the sub-mucosa, leaves a weak stitch.
7. To perforate the sub-mucosa is practically to open into the lumen,
8. To penetrate into the sub-mucosa of the duodenum is practically to perforate the sub-mucosa.
9. It is not only possible, but practical and advantageous to place all the knots of an enterorrhaphy within the lumen.
10. The ideal location for the knot is outside of the peritoneal cavity.

A fully illustrated description of the method is given, and eleven cases reported in December 1900. In June 1901—these with eight others—ninteen cases were reported.

Since the last report we are informed that eleven other cases have been reported to the author.

Devitalized-Air-Toxemia: A Prime Cause of Tuberculosis.

C. Denison, (New York Medical Journal, Nov. 9, 1901), argues the importance of recognizing the basic law of degeneracy which springs from rebreathing once used air, and which finds its chief and final expression in tuberculosis. By the term toxemia is not here meant the sudden asphyxiation from carbonic acid poisoning, or the rapid starvation from lack of oxygen; but the term refers to that lesser vitiation of the blood and living tissue that gradually, through accumulation, results in degeneration, which is the basis or so-called "soil" of disease, rather than any at present recognized distinct affection. This toxemia seems to be due to stagnant, unventilated air existing in the lungs. The vitiated and fermenting combination of the unrenewed pulmonary air, increased by body heat, the outcoming carbonic acid, and the poisonous tissue detritus, is simply a ten-fold intensification of devitalized air outside the body in an unventilated room. This devitalization leads to the pale face, sallow skin, weak pulse, cold hands and feet, etc. In addition the dead air compels inactivity and limited use of the lungs, and this, in turn, means the gradual clogging of out-of-the-way aircells with the products of combustion. In this manner, carbonic acid poisoning and a species of self-infection are more or less permanently established. In this way favorable conditions are furnished for the germination of tubercle bacilli. The frequent assertion by vraious writers that the bacillus tuberculosis is the sole, exciting cause of tuberculosis, and that without the agency of the micro-vegetable parasite there can be no genuine tuberculosis has caused the pretuberculous stage to be slighted.

Strangulated Hernia in Infants.

C. N. Dowd, (New York Medical Record, Oct. 12, 1901) A review of recent

literature indicates beyond all question that infants endur ethis operation very well. It is also true, although operation has been advocated in nurslings with reducible hernia, that, while they bear the operation very well, they also do well under truss treatment, and this should be tried as a routine practice when they have reducible hernia. In the case reported, the intestine had almost slipped back into the peritoneal cavity leaving no palpable tumor, although the strangulation persisted. The operation was done on account of the history and symptoms. Though no hernia could be found, thickened tissue could be felt extending from the external ring toward the scrotum. A high enema brought away no fecal matter. A few hours latter the child began to vomit light yellow semi-fluid material with fecal odor, an operation was done without delay. Within six hours the child had copious movements from the bowels. and recovered without incident. It left the hospital on the eighth day, and healing by granulation took place promptly. The relative importance of the symptoms in these cases is in the order which might be expeced: 1. Tumor. 2. Vomiting. 3. Constipation. 4. Difficulty in urination. 5. Restlessness and apparent pain. 6. Constitutional depression. The records indicate that delay in the effort to interpret symptoms or reduce the hernia by taxis has been the greatest danger, while early operation has been the greatest safeguard.

Appendicitis and Life Insurance.

J. Weill-Manton, (Medical Examiner and Practitioner) suggest the folliwing rule:

1. Any abnormal sensitiveness in the appendicular region justifies postponement.

2. Applicants are admissible when cured by operations; after three or four months when the resection has been done during an attack; in eighteen months or two years when the applicant has been cured by the simple opening of a purulent collection about the appendix. It will always be best to require a statement from the operator or from a physician present at the operation, giving the precise nature and the results of the intervention. The same conditions will hold in cases of circumscribed peritonitis with spontaneous evacuation of the purulent collection.

3. Any typhlitis, appendicitis, appendicular colic or crisis, however slight, acknowledged by the applicant or suspected by the examiner, will subject to a postponement of two or three years.

4. Two or more attacks will require a more lengthy postponement which will be proportionately increased according to the number and severity of the attacks.

5. The research of family anticedent will be considered as an importaut element of greatest moment in the younger applicants.

6. In cases of remote anteceding attacks of appendicitis, the examiner must carefully investigate the existence of signs which might reveal the slightest awakening of the old appendicitis.

7. Every case of chronic and of recurring appendicitis must be rejected.

Practical Results with One Thousand Cases of Nitrous Oxid and Ether Narcosls

H. W. Carter, (Medical Record, Nov. 9, 1901), compares the action of nitrous oxid and ether as compared with chloroform, pointing out some of their use in combination and the results which are thereby obtained. Practically the only danger associated with the use of nitrous oxid is asphyxia, for cardiac complications are exceedingly rare, and are usually secondary to the effect on the respiratory center. With the admixture of oxygen in proper proportions, anesthesia can be induced and maintained indefinitely by nitrous oxid without any symptoms of asphyxia whatever. The main advantages of this gas as a prelimimary to ether are its almost perfect safety and its rapid and pleasant action while the principal disadvantages of ether are its disagreeable pugnent odor, its irritability to the respiratory mucous membrane, and the slowness of the onset of anesthesia. In using the two in combination or succession, the pleasant and rapid action of the gas supplants the prolonged disagreeable sensations of the first stage of ether inhalation. The number of patients who cannot take gas and ether is exceedingly small. Even alcoholics and drug habitués readily respond to the administration of the gas, and surgical narcosis can be quickly reached. In some cases it is better to use chloroform. It is considered a good plan at such times, unless there is some special contraindication, to induce complete narcosis with gas and ether and to continue the administration with chloroform. In neurotic patients and children, the method is particularly valuable. In valvular diseases of the heart, provided there is good compensation, nitrous oxid and ether can be administered with almost perfect safety, as the quantity of gas required is small, all air is not excluded, and the heart quickly receives the benefit of ether stimulation. Old people take gas and ether paticularly well, but special care should be exerted and its use avoided in all case of arterial degeneration. In all pulmonary diseases, provided

the heart is not affected, the use of chloroform, is advised in preference, though mild cases do not contraindicate the use of nitrous oxid.

The Present Status of the Bottini Operation as a Method of Treatment in Obstructive Hypertrophy of the Prostate Gland, Derived from a Summary of Eight Hundred and Eighty-Eight Operations by Forty-Eight Operators.

Orville Horwitz in the Philadelphia Medical Journal. Nov. 30, 1901 believes that the value of this method of treatment is brought more forcibly to our attention when we compare the mortality of the Bottini operation with that of other radical measures in vogue for the relief of hypertrophy of the prostrate. The mortality of partial, perineal or suprapubic prostatectomy is given as 14.3 per cent. Unfortunately, the employment of this operation is limited to only special forms of prostatic overgrowths. The mortality of the complete removal of the gland by means of either the perineal or suprapublic route is variously estimated to be between 18 and 25 per cent, whilst that of the Bottini ranges from 4. 5 to 7.2 per cent. varying in the hands of different operators, giving an average of about 5 per cent. From the results obtained from the list of cases tabulated, I think we are justified in drawing the conclusions that there is less fear on the part of the patient to submit to the operation than there is to any other surgical procedure so far suggested for the relief of protetic hypertrophy.

The principal advantages to be derived from the method of treatment are: A short time only is required to perfom the operation, which is attened with little shock and usually slight loss of blood, convalecence is rapid and the mortality is lower than that by any other radical measure.

Cures result in the large majority of cases especially if the operation is undertaken early. Marked improvements may be looked for in a vast number of cases, where otherwise individuals would be condemned to suffer, as the danger attending any of the other radical methods of treatment would be too great to warrant their employment

Failures occur in but a comparatively small percentage of cases, want of success being due to the pathological changes and complications which have taken place. Especially is this true in those instances where an incurable cystitis exists.

The operation is contraindicated when a valve-like formation exists, or where there is a greatly increased overgrowth of the three lobes, associated with tumor formation, giving rise to a pouch, above and below the neck of the bladder.

It may he employed with benefit, and safety, as a pallative measure in cases of prostatic hypertrophy of long standing, associated with cystitis, when the general health will be improved and constipation which is usually associated with this condition, relieved, mitigating the prostatic spasm of the urethra, and rendering the insertion of the catheter easy and painless.

Pyelitis, when present, adds greatly to the danger of the operation, but is not always a contraindication to its employment.

The character of the growth has but little bearing on the results of the operation.

The operation may be employed as a safe and satisfactory means of causing a suprapubic fistula to close, which so frequently follows a suprapubic cystotomy when the prostate gland is hypertrophied.

In sutiable cases it is not only the best radical measure thus far devised for the relief of prostatic hypertrophy, but is attended by the smallest mortality.

The operation is especially indicated in the beginning of obstructive symptoms due to hypertrophy of the prostate gland and may be regarded as a prophylactic method of treatment.

The operation is capable of producing a symptomatic cure in a great number of cases of various conditions and configurations of the prostate glands due to hypetrophy, as is shown by the disappearance of prostatic spasam, the restoration of the functoin of the bladder to its normal condition, and the improvement of general health.

When operating early, before the prostate has become much enlarged, the safest method to pursue is to perform a preliminary perineal cystotomy, introducing the "perineal galvano-cautery incisor" of Chetwood, so as to make the incision in the prostate.

In some instances a prolonged preparatory treatment is necessary before the operation can be safely undertaken.

In cases of prostatic obstruction, which have existed for a lengthened period, where there is chronic cystitis, the physical condition of the patient being below par, both local and constitutional treatment must be persisted in for months after the operation before the great benefit derived from the procedure can be insured, which treatment would be ineffectual unless the obstruction had first been removed.

Induction of Abortion.

Dr. Joseph Taber Johnson, at the Richmond meeting of the Southern Surgical and Gynecological Association reports two interesting cases, in which attempts were made to produce abortion. The first case, a medical man attempted to produce abortion at about the tenth week of gestation by inserting into the uterus a No. 8 flexible bougie. Some difficulty was experienced in getting it to pass the internal os, but after persistent effort the instrument was pushed up nearly it entire length, leaving perhaps two inches protruding into the vagina. The bougie was supposed to be coiled up in the uterus. Its expulsion was prevented by a cotton tampon pushed high up in the vagina. A physician informed the writer that when he removed the tampon, the fœtus and a portion of the membranes came away. He was unable, however, with the most diligent search, to find the bougie, and finally came to the conclusion that it must have slipped out, without the patient's knowledge, during one of her many visits to the closet in the night. The second day after the abortion, the patient had a severe chill, followed by a considerable acceleration of pulse and temperature, with gradual but steady increase of abdominal pain and distention. Dr Johnson saw the patient in consultation, made an abdominal section, and removed the bougie from the peritoneal cavity.

The second case was one of ruptured umbilical hernia, in which several feet of intestine had been out on the surface of the abdomen, and covered with unsterilized cloths and bandages for at least seventeen hours. The patient had had the hernia for fifteen years, and was fifty-seven years of age. The intestines were very dark and very cold and dirty. A thorough cleansing and warming with hot salt solution succeeded finally in getting them and the adjoining skin of the abdominal wound into a tolerably fair condition. About a pound of omentum was removed, which bled in a number of places, from which adherent clots had been detached. The tight rim encircling the protruding gut was incised above and below, and the three feet of intestine returned to the abdominal cavity, which was subsequently filled with hot salt solution. A rather long and difficult operation was then performed for the radical cure of an old umbilical hernia in a very fat abdominal wall. The woman gave every promise of getting well for seven days, then she suddenly grew weak, and collapsed and died on the eighth day, apparently of a general septic peritonitis.

The Medical Aspect of the Anarchist.

It is well known fact says the New York Medical Times that criminals, lunatics and anarhist meet on one common basis in being enemies to the welfare of society. The actions of these three clases result in murder, assassinations, burglaries or other crimes against society. There is a slight distinction, however, in the method with which they do their work. The crook, the burglar, or the common murderer is an enemy of society in its individual capacity more as man against man. The lunatic is also an enemy to the individual, but in a more indefinite way, and his influence may spread over wider areas because of the lack of system of thought in his work, but the anarchist thinks nothing of the individual, but wages his war against society as a whole. In an interesting article in the September issue of the Medical Review of Reviews, Dr. W. D. Noyes takes up the phychological study of anarchy and draws some interesting conclusions. He divides anarchists into two varieties—those who show excessive development of certain aggressive traits, and those who are weak and show the lack of self-control to a marked degree. Those who lead or "suggest" from the first class, while the flock of feeble minded anarchists who respond to the suggestions of the master minds, as certainly as the subjects of a professional hypnotist, form the second.

The word "degenerate" undoubtedly covers both these classes. They are the outgrowth of centuries of oppression in European countries, and they have brought to America the inborn feelings of discontent and dissatisfaction with any form of society.

It has been the fortune of the writer to mingle extensively with the circle of society among which anarchists might reasonably be supposed to be most common, but he has never found any anarchist of the pronounced type who was not foreign-born or the child of foreign-born parents. It is almost an invariable rule, the man who has American ancestory is never an anarchist, no matter what might be his station in life. Dr. Noyes believes that the mass of unsuccessful men who develop radical views of socialism are easily subject to the more radical mental contagion when an annihilation of the existing order is suggested. He looks upon it as an expression of the types of hysteria in man as a mass, not as an individual, and he places the anarchist on the borderland of mental abnormality, where the neuropat hand psychopath are found, Dr. Noyes believes that as an individual the anarchist is comparatively harmless, whie

as a class he is the most dangerous element of modern society, and he believes the only remedy to prevent his mental contagion and the passing of the danger of suggestion is to break up anarchistic headquarters and segregate the leaders.

Infrapubic Opening of Pelvic Appendiceal Abscesses.

J. F. Baldwin, A.M., M.D., Columbus, Ohio (Cleveland, Medical Journal, Sept. 1901):

I wish to call attention to a class of pelvic abscesses which, while by no means common, are not so rare as the scanty literature on the subject would lead us to suspect. I refer to pelvic abscesses resulting from appendicitis. During 1900 I saw and operated on four of these cases, and a brief review of the history of one of them, which may be taken as a fair sample of all, will perphaps be instructive:

Case 1. Mrs. S., of Hilliards, Ohio, aged 25, was seen in consultation with his physician, Dr. Davidson, on September 29, 1900. The patient was taken with symptoms of appendicitis about two weeks before. The trouble seemed to be chiefly in the pelvis rather than in the region of the appendix, but the history was very plain of appendicitis. The crisis, however, seemed to have passed, and I advised delay, especially as there could be no tumor made out. The case was seen again five days later. His condition then seemed to be favorable so far as general symptoms were concerned. He was complaining, however, of deep trouble in the pelvis. Nothing could be made out in the region of the appendix. Rectal examination, however, showed evidences of a pelvic abscess. This abscess pushed the rectum back and the bladder forward, and could itself be felt just back of the base of the bladder. As there seemed no safe way of opening this abscess from above, and as the symptoms were not grave, a little longer delay was advised. This morning, however, (two days later) the patient seemed very much worse, and I was sent for. The abdomen was then greatly distended, being distended not only with gas but with an unusually full bladder. He had had repeated injections of morphine for relief. Rectal examination showed the abscess about as on the previous occasion, but it seemed unwise to longer delay. An anesthetic was given, and the abscess opened with a pair of scissors through the rectum; these scissors being introduced with their points closed into the abscess cavity and then withdrawn with their blades widely separated. Exit was given to a large amount of the vilest possible pus. The cavity was washed out freely with water, and a gauze drain introduced. Immediate relief was afforded by the operation, and prompt recovery took place. Although the recovery was prompt and satisfactory it was not complete, since there still remained a little tenderness deep down in the pelvis, this tenderness being elicited by pressure from above on the right side. I saw the patient several times at my office, and always could elicit this tenderness. As it was evident that the appendix was still making trouble I advised its removal in the interval. This was accordingly done at the Grant Hospital on December 1. The usual incision was made. Quite a number of loops of intestine were found adherent in the pelvis, and the appendix itself adherent in the pelvis, its tip being attached at the very bottom. The adhesions were separated thoroughly, and the appendix removed. It was entirely obliterated except for a short distance from the bowel and at its distal end. The distal end contained simply a little muscus, but this having no connection with the bowel was keeping up a constant irritation. Recovery was prompt and complete.

These four cases constitute about half of the entire number of cases which I have had in which I have opened through the vagina or rectum a pelvic abscess having its origin in an appendicitis. All of these patients have made an inmediate recovery with the utmost promptness. In three of them a subsequent operation for the removal of the appendix has been rendered necessary, this operation fully confirming the orgin of the original abscess.

In systematic articles and treatises on the subjec of appendicitis, I can find practically nothing in regard to this method of treating pelvic abscesses resulting from appendicitis. In the Journal of the Ameridan Medical Association of February 16, page 477, appears a condensation from a German exchange of an article in which the writer condemns the rectal route for opening abscesses in the rectovesical pouch, and advises instead a parasacral opening carried around the left side of the anus with turning back of the coccyx. Such an opening would certainly give free access to the abscess cavity, but it involves much mutilation, which it seems to me is entirely unnecessary.

In the same journal, of January 5, 1901, page 27, in an article by Deaver, of Philadelphia, he mentions a variety of "walled off" abscesses confined to the pelvis. He states that in these abscesses the appendix will always be found to be located in the pelvis." In the treatment of such an ab-

scess he states that "vaginal or rectal puncture is to be heartily condemned for several reasons: that it is contrary to sound surgical principles; that it is attended by certain risks; that it does not remove the source of the disease; and that it is at best only a very dangerous and temporary makeshift." Dr. Deaver's work in appendicitis has been unquestionably very large. He does not state what his experience has been in the treatment of these pelvic abscesses, nor what his results. It is possible, therefore, that the statement quoted has been made on general principles and not as the result of experience.

In the American Journal of Surgery and Gynecology, for March, 1901, in an article by Bernays, of St. Louis, on appendiceal abscess, he speaks of this particular form of abscess under consideration and says "the drainage of such abscesses per rectum in men and per vaginiam in women is an easy and regularly successful treatment in unconplicated cases." So far as I can judge from his article his experience with these abscesses thus opened has been limited to three cases.

In the Philadelphia Medical Journal of February 2, 1901, appears a condensation of an article on this subject by J. Rotter, which originally appeared in the Deutsche Medicinsche Wochenscrift, of October 4, 1900. In his article Dr. Rotter has collected 45 cases of these abscesses in Douglas' pouch. Nine of these were operated upon through the abdomen with three deaths. The others operated upon through the rectum or vagina with only two deaths.

In the diagnosis of these abscesses we have present the symptoms of ordinary pelvic abscess, and arrival at the diagnosis of the cause either by the direct history pointing to an appendicitis or by exclusion. In all of the cases which I have seen the diagnosis seemed to be fairly plain of an appendicitis as the cause. While in most of these cases, doubtless, the appendix will be found as a pelvic organ, this cannot be true of all the cases, as shown by the first case which I have reported. In these other cases we doubtless have, as shown by Dr. Rotter, a circumscribed perityhilitic suppration in which there is a serious outflow in the peritoneal cavity accompanying a general peritoneal involvment, and this fluid collecting by gravitation in Douglas's pouch becomes infected. A symptom to which attention is called by both Rotter and Bernays is that of unusual tympany. This symptom I have not noted as marked in any of my own cases. In some cases the location of the abscess results in irritability of the bladder and rectum, which is manifested by the usual symptoms. The symptoms are in all cases sufficiently marked to least to a digital examination through the rectum or vagina, and this will lead to a correct diagnosis of the conditions present.

The opening of these abscess *per vagiam*, or *per rectum* in males and vergins, seems to be the simplest and most natural procedure in the world. The tissues are thin, no important structures are involved, the drainage is almost ideal, and at least temporary recovery would seem to be inevitable. If the appendix continues to make trouble its removal, as an interval operation weeks or months later, will be attended with the absolute minimum of risk, while to open such an abscess filled to distention with the vilest possible pus through an abdominal incision and across the open peritoneal cavity, means very great risk of a fatal peritonitis, or in case this is obviated by thorough packing, it means an extensive incision with prolonged drainage and an almost inevitable hernia. It seems to me, therefore, that the suprapubic operation in such cases is not prudent surgery, and that the results must be greatly inferior to the infrapubic procedure.

Otitic Sinus Phlebitis and Thrombosis.

Dr. J. E. Sheppard, in the Brooklyn Medical Journal for November, presents an instructive paper on Otitic Sinus Phlebitis and Thrombosis, in which he has endeavored to cover our present knowledge of the subject, closing with an account of four interesting cases. After a few statistics relative to the fatality of our diseases, the pathology of the subject is outlined, followed by a careful consideration of the symptomatology of sinus disease. The symptoms are divided into four groups:

1. *Those due to the Mastoid Inflammation*, which is as a rule the cause of sinus trouble.

2. *Those of Cerebral Origin*, among which are *headache*, usually hemicrania, occipital or frontal on the affected side, or in the ear region, all made worse by pressure or percussion on the posterior part of the mastoid process, *vomiting* and *constipation*, (which changes later to diarrhœa) more common when meningitis is present, *consciousness usually retained* in uncomplicated cases, and, as less significant and more often suggestive of complications, *delirium*, *coma*, *restlessness*, *hyperæsthesia paralysis*, *vertigo*, *chocked disc*, and *optic neuritis*.

3. *Those externaly perceivable* and due to *a*. obstruction of the sinus and over-distension of the superficial veins, together with *b*. inflammation of the veins commu-

nicating with the sinus. In this group are placed Griesinger's symptom, Gerhardt's symptom, emptyness of the jugular below the thrombus, (to the two latter is not attached much importance), oedema of the post-mastoid region, and of the posterior cervical triangle of the face, and the anterior neck region; also the symptoms due to pressure on the cranial nerves whose avenue of exit is the jugular foramen; also tenderness over the regions where oedema is prone to occur, together with the diagnostically important, hard, tender, cord-like, feeling along the anterior margin of the sternomastoid muscle, over the course of the internal jugular vein.

4. *Pyaemia and Septic Symptoms.* Here are mentioned the characteristic rapidly-flunctuating temperature, chills, fever, sweating, enlargement of the spleen, varying pulse, coated tongue, lost appetite, emaciation and late diarrhœa.

Under the heading of prognosis the following appears: Without interference death usually results, but at the present time we feel that the prognosis in a given case, if recognized in the first stage is almost uniformly good; that, when further advanced, with existing pyæmic manifestations, but without metastases, there is still an excellent chance for recovery; and even under the worst conditions, and when phlebitis has extended to the jugular vein, together with mastastases, a small number of cases recover. A case is absolutely hopeless only when *in articulo.*

Next in order is a clear section on diagnosis, followed by one on differential diagnosis, forming together an important part of the subject.

In regard to treatment the writer of the article advocates as a general rule, admitting exceptions, that the first step in the operation shall be ligation of the jugular vein, above and below, and resection of the intervening portion, claiming that, "at any time after the initial chill, this is good conservative surgery." Follow this with the ordinary mastoid operation and a cross incision over the course of the lateral sinus, which must be necessary. Hemorrhage is to be controlled by gauze tampons.

Use of the asperating needle as an aid to diagnosis is not approved.

Anti-streptococcic serum is mentioned as of possible use. Any one specially interested in the subject will, we think, be repaid by careful reading of the article as a whole.

Glycosuria.

W. H. Thompson, (British Medical Journal, Oct. 12, 1901), discussing this subject before the British Medical Association, said that the glucose norminally circulating in the blood might be disposed of as follows: 1. It might be oxidized or combusted forthwith, that is, used up for tissue nourishment. 2. It might be stored for a time in the muscles to be drawn upon during muscular contraction as one of the chief sources of energy, and at the same time, of heat. 3. It might be stored up in the liver as glycogen, where it formed a reserve available for one or other of the foregoing purposes. 4. It might, if present in considerable excess, lead to the storing up of fat—a form of reserve less easily reached than glycogen, and apparently only resorted to when the demands upon the store of this material were excessive. 5. It might forthwith be expelled from the body in the urine. Glucose in small amount has been shown beyond doubt to form a normal constituent of healthy urine, and it is interesting to note that sugar is always expelled from the blood if its amount in this fluid should rise much beyond 0.2 per cent. It is justifiable, therefore, to infer that while sugar is a necessary constituent of the blood its quantity has to be kept low, usually below 0.1 per cent., and anything much beyond this is injurious to the normal metabolism of the body.

The cause usually assigned for pancreatic glycosuria is that an internal secretion formed by the pancreas and necessary for the metabolism of glucose is lost to the body, and that this secretion in normal conditions is carried to the liver and enables it to perform its glycogenic functions. Another explanation, however, is also offered which Professor Thompson thinks has many points in its favor, namely, that owing to the loss of pancreatic juice digestion of proteids goes wrong in consequence of which poisonous substances are formed in the intestine which become absorbed and throw the liver metabolism out of gear. In the support of this view the following deserves attention:

1. In pancreatic diabetes a large excretion of aromatic sulphates in the urine always occurs indicating a perverted condition of proteid digestion.

2. In cholera, glycosuria often appears when the secretion of urine becomes re-established.

3. The filtrate from an artifical pancreatic digestion mixture, after leucin has been crystalized out and removed, causes glycosuria when injected into animals. The same condition has been caused by the dialysate from the intestinal contents of diabetics.

4. In recent years it has been shown by

Kossel and Kutscher that antipepton, one of the end-products of pancreatic proteolysis, is in reality composed of several crystal-like substances, one of which is a base called arginin. In Professor Thompson's hands, out of two experiments in which arginin was administered to dogs with their food, one showed glycosuria to the extent of over 1 per cent. of surgar. In the second experiment this result failed, but the dose employed was considerably smaller than in the first.

5. The fact that the condition takes some time to develop after removal of the organ, and a still longer time to reach its maximum.

6. That some cases of this affection are not improved, but, on the contrary, made worse by the administration of chopped-up pancreas with the food.

Treatment of Pleural Fistulæ Following Operations for Empyema.†

Pleural fistulæ following the various operations for empyema are due to different causes. As long as pleural fistulæ presents it will discharge pus or sero-pus. Long continued profuse purulent discharge leads to amyloid discharges in the liver, kidney, spleen and velli of the intestines. Operation is indicated, both as a curative and a life-saving procedure, in pleural fistulæ. Pleural fistulæ may be caused by—

1. Late detection and tardy evacuation of the purulent effusion from the pleural sac.

2. Too prolonged use of the drainage tube.

3. The use of a too-lengthy drainage tube.

4. Caries of one or more ribs. This is less likely to occur if the ribs have been resected sub-periosteally. When the pleural fistulæ is due to this cause thorough curetting of carious rib and the dissecting out of the pleural fistula will suffice in most cases to bring about a cure. In some cases resection of the carious portion of the rib is indicated.

5. May be due to a portion of the whole of the drainage tube having been left or having been sucked into the pleural cavity. Remove, by the aid of long forceps, the offending body. This is at times facilitated by filling the abscess cavity with warm sterilized solution in the hope that the return stream will carry the tube into the vicinity of the opening where it can be more easily grasped and removed. An extensive resection of the chest wall may be necessary so as to gain access to the foreign body.

6. To the daily or frequent use of pleural irrigations in the post-operative treatment of empyema. Do not irrigate the pleural cavity. It delays and prevents the formation of adhesions between the costal and parectal pleural. It has caused sudden death. In putrid empyema, authorities sanction irrigation as long as the discharge remains putrid and no longer.

7. To defective drainage of a pus-pocket. Secure thorough drainage.

8. Insufficient expansion of the lung. This is due partly to mechanical pressure of the thickened vesceral pleura and adherent inflammatory bands, partly to pleurogenous pneumonia.

9. To insufficient sinking-in of the chest wall. The collapse of the chest wall (owing to its regidity and its bony framwork) can not, unless assisted by surgery, extend beyond certain limits. With a chronic pleural fistula, there is a hollow secreting cavity in the chest. This cavity unless obliterated is very liable to cause death by septic absorption, exhaustion or amyloid disease.

Estlander's and Schede's operations, each have for their object the destruction of the regidity of the chest wall, the obliteration of a suppurative cavity with rigid walls by mobilizing the thoracic walls. Neither of these two operations is to be performed until all that unassisted nature can accomplish in the way of retraction of the chest wall and expansion of the lung has been effected.

Estlander's operation consists in removing sub-periosteally a number of ribs so as to allow of the agglutination of the costal and visceral pleura. The first two ribs should not be sacrificed on account of their important connections, their relation to two large blood-vessels, their relative inaccessibility and their important mechanical role. The floating ribs are not to be resected. Their resection would serve no useful purpose. The rib resections must be as extensive as the size of the cavity demand; must permit of collapse of the chest wall and of contact between the parcetal and visceral pleurae. The failure of the operation is often due to too limited resection. Hemorrhage must be minimized. Successive operations are at times required to achieve cure. The largest rib-resections are made on that portion of thorax which is most distant from the lung. As many as eight ribs have been removed, and as much as from two to fourteen cm. of each rib have been removed. Curette virgorously both pleuræ; cleanse and wipe out cavi-

†Dr. A. P. Heineck, Chicago.

ty; suture the wounds; insert one or two drainage tubes at the most dependent parts; drainage must be thorough. If needed, pack the cavity lightly with gauze. Apply a bulky antiseptic dressing; dress the wound with arm press and immobilized against the chest wall.

Schede's operation is especially applicable to cases with greatly thickened pleuras. It is a resection of the entire thoracic wall excepting the tissues superficial to the ribs and the intercostal vessels and nerves. Make U-shaped or semi-circular incision beginning in front at the level of the 4th rib and at the outer border of the pectoralis muscles; carry incision downward to the 8th or 9th rib, and in such a direction that the apex of the flap rests upon the post-axillary line. The knife is then caried upward and backward on a line with the posterior border of the scapula. The knife is carried to the ribs. This flap is dissected from the ribs and retracted upward. The scapula and sub-capularis muscles are raised from the trunk with the flap; resect ribs; lowest rib to be removed is the first attacked. After removal of ribs, intercostal muscles and parietal pleuras are removed.

As can be seen, Schlede removes the rib, the periosteum, the intercostal muscles and the costal pleura. It is well in the resecting of the chest wall not to interfere with the intercostal nerve; cleanse and curette the pulmonary pleura; stop hemorrhage; turn down your flap with the scapula and subscapularis muscle. This flap is sutured to edges of wound except at point where the tube or gauze emerges. It obliterates the pus-cavity by the formation of granulation tissue, thus uniting the parietal with the pulmonary pleura.

Delorme's operation, also called Pulmonary Decortication, or Visceral Pleurectomy, consists of stripping the thickened pleura from the collapsed lung so as to enable the latter to expand once more. It attacks the adhesions that collapse and bind the lung in the cerebral gutter. It attacks the thickened pulmonary pleura that mechanically prevents the expansion of the lung. If the operation be successful, the empyæmic cavity is obliterated by the restoration of volume and function to the lung. The thoracic cavity is opened by one of the various osteoplastic flaps. The location and size of the flap is determined by the location and size of the empyæmic cavity. A liner incision is made in the pulmonary pleura; a grooved director is introduced between the thickened pleura and lung with scissors and bistoury. This dissection is the difficult step of the operation. It must be done cautiously and gently.

Once this has been done in suitable cases, the lung expands. The osteoplastic flap is then put back in place and its edges are sutured.

Early Operations in Appendicitis, and the Method.

Dr. Joseph Price read a paper with this title at the recent meeting of the American Association of Obstetricians and Gynecologists. He had in the past three months operated in about a hundred cases of this disease. Seventy-five per cent. had been managed by open treatment. All of them had been explosive cases, and none of the operations were done on the first or second day. In two ball-players the operations were done on the third day. In both cases he found gangrenous appendicitis with perforation and general peritonitis. Both were recognized and could have been operated on twenty-four hours earlier. He was satisfied that there was but one treatment for this disease—early, clean removal of the appendix. The choice of method should not worry operators. A pair of scissors with needles and fine thread was all that was necessary. The appendix should be cut off level with the cæcum, and the opening closed with fine silk. This summer the operations had been done by him chiefly on patients between the ages of eight and twenty. About seventy-five per cent. were boys—fine, athletic chaps, and about twenty-five per cent. girls. A large number of the latter were menstruating at the time of the operation. In some instances it complicated the diagnosis. The disease had been quite common and fatal at summer resorts. A large number of operations had been done at Atlantic City, and a few patients had been sent home for operations. The interval operation had done much to mislead the general practitioner, and much to complicate the operation, in which there should be no complications.

Gangrene Following the Use of Carbolic Acid.

J. G. Sheldon, (New York Medical Record, Oct. 12, 1901), reports a case of gangrene which necessitated amputation. A colored man, 31 years old, eight days previously had accidentally spillled some dilute carbolic acid solution on his left foot. Five days later the foot began to feel numb; this numbness increased, and on the seventh and eighth days the foot became "dead and painful." Examination showed the left toes and foot, as far as the mediotarsal joint, to be in a state of dry gangrene. The

tissues about the ankle were swollen and edematous, and showed beginning gangrene in places. No definite line of demarkation could be made out. The remainder of the examination was entirely negative; pulse was 100, and temperature 99.8 deg. F. Amputation was done at the middle of the leg. The fatty tissue at the site of the incision seemed edematous and slightly more yellow than normal, and it was noticed that after the larger vessels had been tied, and the constrictor removed, no bleeding occurred from the stump. The gangrene extended, being now of the moist type, and in two days reached the knee. Sixty hours after the first operation, a second amputation was done at the junction of the middle with the upper third of the thigh. The wound healed rapidly and the patient made an uneventful recovery. Examination of the amputated stump showed no gas in the tissues. The vessels and nerves appeared normal above the site of gangrene. Slides from the gangrenous parts showed only a small, straight bacillus, which had no charateristic arrangement, and which stained with the ordinary stains and decolorized with Gram's method. The bacillus grew rapidly on ordinary media, white circular colonies on ajar, but ceased to grow in four or five days, and seemed to die in a week. Injection of cultures into guinea pigs gave negative results. It appears that while gangrene may follow the use of any strength solution, it occurs more often in cases in which dilute solutions are applied. The cause of the gangrene is at present unknown. If the acid is applied, it should be used only when the conditions for its evaporation are suitable, for it has been noted that gangrene is more apt to occur in cases in which the acid is applied in such a manner that it cannot evaporate.

Report of the Commission Appointed to Investigate the Cases of Tetanus in St. Louis Following the Administration of Diphtheria Antitoxin.

The Committee drew the following conclusions:

The diphtheria antitoxin prepared by the Health Department of the City of St. Louis, and dated September 30, and some of the serum dated August 24, was the cause of the recent deaths from tetanus in the cases where this tetanus was used.

This antitoxin was sterile, but contained the toxin of the tetanus bacillus in considerable amount.

There were two different sera issued under the date of August 24. One portion not containg the tetanus toxin and characterized by other properties, while the other contained the tetanus and was identical with the serum bearing the date of September 30.

The most important result we have arrived at is the positive demonstration that the toxic serum dated August 24 and that dated Sepember 30 are identical. From this we conclude that the serum of September 30 issued without having been tested by the proper methods, and that a part of it was filled into bottles bearing the date of August 24, and were furnished with labels having previously been stamped with the date. We are justified in drawing this conclusion from two observations. First, that the serum of September 30 was issued before there was time to have performed the simple tests necessary to determine the antitoxic potency of the serum. Second, in the same way, serum dated October 23 came into our possession on November 1. This serum had been issued to physicians by the Health Department, and by them returned to the coroner. It is obvious from this that no animal experiments that the serum of September 30 was issued in the same way.

We must deny any possibility of latent tetanus having existed in the horse "Jim" from August 24 to September 30, as no well authenticated cases have been reported in which the incubation period extended over seven days, in experiments directed to test this point. The period of incubation cannot be determined from clinical observation, from the nature of the case.

It therefore follows from this that the serum drawn on August 24 was free from tetanus, but that the serum of September 30 was drawn during the period of incubation, and had it been tested upon animals it must necessarily have revealed its toxic properties.

From the foregoing facts we are forced to conclude that the diphtheria antitoxin prepared by the City Health Department has been issued before it was possible to have obtained results from the absolutely necessary tests. Had these tests been performed, the results upon animals would have been such that the serum would not have been dispensed, and the cases of tetanus forming the basis of this report could not have resulted.

Some Phases of Nephro-Lithiasis.

In an article in the Interstate Medical Journal, A. H. Cardier, in describing several cases of nephro-lithiasis offers the following deductions:

1. Hemorrhage from parenchymatous organs is, in most instances, easily controlled.

2. Nephro-lithiasis is more prevailent than is generally supposed.

3. A stone having formed in the pelvis of the kidney, if too large to pass through the ureter, will sooner or later produce symptoms demanding its removal.

4. Suppuration, in stone cases, is, as a rule, a late process, and should be prevented by early surgical treatment.

5. A wound in a healthy kidney heals rapidly.

5. Obscure, persistent pains in the region of the kidneys, in a patient who has had a renal colic years ago, should lead to an exploration of the kidney.

7. The operation of nephro-lithotomy has a very low mortality.

8. The kidney should not be removed unless practically destroyed by the disease.

9. There exists a special cause for the development of stones in the right kidney.

10. With a carefully obtained clinical history, the diagnosis of stone in the kidney is usually easy.

11. At the time of operation the ureter should be explored, that its patency can be assured.

12. Post-operative patience and faithful effort on the part of the surgeon will result in the saving of many organs; otherwise removal will be necessary.

A Note on the Morbid Conditions Simulating Adenoids.

Wyatt Wingrave (British Medical Journal, Sept. 28, 1901,) says: A large number of children come under our observation who while exhibiting some or all of the classic symptoms of adenoids, are found on examination to be free from that trouble.

These cases increase in number as laymen become more familar with the existence of this affection and are, consequently, prompt to seek relief with a ready-made diagnosis.

It may happen even that the classical signs are present in so striking a degree that a detailed inspection by finger or mirror is considered superfluous by the practitioner himself, and he takes their existence for granted. For this there is much justification, since digital exploration is not always expedient without an anesthetic in the case of a very sensitive child accompanied by a hypersensitive parent.

Posterior rhinoscopy is proverbially difficult in children, especially those who are the subjects of enlarged faucial tonsils; we have, therefore, practically to depend upon our sense of touch for a positive confirmation and any other evidence, however conclusive it may appear, is at the best only presumptive.

Still further, complete removal of tonsils and adenoids is not infrequently followed by persistence of the symptoms, and we are often unjustly inclined to blame the parents for neglecting the necessary post-operative treatment. Examination of such a case will probably reveal one or more of the conditions to be described.

Excluding those forms of nasal obstruction readily recognized by anterior rhinoscopy, the morbid conditions symptomatic of adenoids may be thus grounded: 1. Diminutive choanæ and nostrils; 2, low vault of naso-pharynx: 3, paresis of soft palate and pharpnx; 4, vomerine crest; 5, distortion of vertebral column; 6, retro-pharyngeal abscess; 7, hypertrophy of palate tuberosites; 8, webs and neoplasms.

An Analysis of Thirty-Two Cases of Congenital Heart Diseases.

John Lovett Morse, (Archives of Pediatrics, October, 1901).

As to the classification of these cases, the diagnosis of patent foramen ovale was made in six cases, and a defect in the ventricular septum seemed almost probable in six others; in seventeen the chief lesion was thought to be at or about the pulmonary orifice; in five of these patency of the ductus arteriosus seemed probable; in three not even a guess as to the situation of the lesion seemed justified. Prematurity seems to be a more important frctor in the etiology of patent foramen ovale than of other conditions.

The chief points brought out in the study of these cases are:

1. The considerable proportion of cases in which the cardiace lesion was discovered during a routine physical examination, there having been no symptoms referable to the heart.

2. The length of time which the conditions may exist without the development of any symptoms, several cases having shown no symptoms at three and four years of age.

3. The comparative mildness of the symptoms in cases of patent foramen ovale.

4. The recovery form lesions which from physical examination were apparently the same as those in cases which resulted in chronic invalidism and death.

A Clinical Classification of Insanity.

Dr. F. X. Dercum (Journal of Nervous and Mental Disease, September), in a paper read before the American Neurological Association, concludes his article as follows:

1. All of the mental disorders which result from the infections, the intoxications, the diatheses, the visceral diseases, the diseases of the nervous system, pregnancy

the puerperium, and lactation—in short, from all of the diseases and morbid physiological states—belong to the symptom-group of delirium-confusion-stupor-dementia. How closely related the various forms of this group are, we have alreaey seen. Indeed, delirium, confusion, and stupor are largely interchangeable terms possessing a certain degree of equivalance, and it must depend largely upon the activity of the morbid process, as well as upon its character, as to which of these forms is present in a given case. That secondary differences of symptoms, dependent upon the nature of the infection or the special poison that has been ingested, are present, goes without saying, but these differences in no way affect the truth of the general statement.

2. The melancholia-mania syndrome bears no relation to the various infections, intoxications, or visceral diseases. Neither mania nor melancholia ever results from them. Mania and melancholia are diseases primarily of the nervous system—*neuroses*, so to speak—and are largely hereditary.

Much confusion has arisen from the loose and unscientific use of the words mania and melancholia, and in this respect alienists, neurologists, and general practitioners have alike been guilty. To speak of a delirium as a mania because it happens to be attended by excitement, is certainly a gross misuse of terms and cannot be too strongly condemned. To designate a confusional insanity as a melancholia, merely because the delusions are destressing or painful, is equally unscientific and reprehensible. To say that a melancholia is caused by typhoid fever or that acute mania is caused by the abuse of alcohol, is to utter nonsense. Mania and melancholia are phases of a special synodrome which bears no relation to such causes. When a mania or melancholia actually occurs in a person who has suffered from such causes, the relation is to be regarded as accidental, or at most that the antecedent disease allowed the neurosis to become manifest, but was not itself a cause. I venture further to say that such coincidences are of the utmost rarity. Again, the relation of the internal medical diseases to paranoia is of like nature. Thus, we often speak of an alcoholic paranoia. The truth doubtless is that alcohol of itself can never cause paranoia; but, on the other hand, it is probable that, in persons already paranoiac by organization, the alcohol causing mental degeneration brings the garanoiac weakness to the surface; and this is no doubt also true of the action of other poisons. To conclude, melancholia-mania and paranoia—as well as the neurasthenic-neuropathic insanities—bear no relation to internal diseases. All causes, however, that are attended by persistent depression of nutrition or by degenerative changes in the nervous system, may favor their onset. The rarity of a clinical history of a case of melancholia-mania even presenting such a relationship, is of sufficient significance.

3. The delirium-confusion-stupor, syndrome may occur at all ages. Melancholia-mania and paranoia, on the other hand, are related to definite periods of life.

4. The delirium-confusion-stupor syndrome usually occurs independently; its forms may, however, occur as complications or episodes in any of the other affections.

An Investigation of the Boston Ice Supply.

Dr. Hibbert Winslow Hill, (Boston Medical and Surgicsl Journal November 21, 1901). On theoretical grounds the danger of infection through ice is very small. Practically, and under the present conditions of the Boston supply, danger of infection through natural or artificial ice is almost *nil*. It is not greater than that involved in drinking the Bostor tap water, and is certainly infinitely less than that involved in drinking milk. The bacteria present are, except in the extremely rare cases where typhoid bacilli may exist, practically harmless. "Dirt" is found in both natural and artificial ice, usually more abundant and in coarser particles in the former, finely divided in the latter. Artificial ice made from exhaust steam shows a slight oily scum at times after melting,

The Personal Factor in Tuberculosis.

D. Duckworth, (Lancet, Nov. 9, 1901) maintains that there is a class of persons who, by inheritance or acquirement, owing to various debilitating conditions, are frail and delicate, endowed with a specific proclivity to become affected by irritants of all kinds, and especially prone to infection by tubercle bacilli. Such persons are of delicate constitution and are apt to manifest this delicacy in various ways throughout life, such developments indicating their scrofulous habits of body.

They may never become tuberculous, though always scrofulous. The latter proclivity may blend with other habits of body and seriously modify the ailments induced by them. We have not to wait for tuberculous invasion to occur before we pronounce them scrofulous, since they carry with them the features and characteristics of the scrofulous condition beforehand. It is a question of tissue or soil-proclivity in the particular host which is to harbor the tuberculous microbe. The ailments of the strumous individual are not necessarily tu-

berculous. The direct transmission of tuberculosis *in utero* cannot be denied as a possibility, but there is no reason to believe that it is of common occurrence. The liability to tuberculous infection is limited, certain persons are distinctly more prone to fall a prey to it than others, and happily the majority of mankind presents a resistance to it, no doubt varying in degree, but in many cases amounting to practical immunity. The personal factor or the relation of the host toward the intruding and infecting parasite, is of the supremest importance. For instance, the prognosis of tuberculosis in gouty individuals is relatively favorable; there is less tendency to softening, and the products tend to sclerosis, fibrosis, and calcification. Lastly, too, much is heard of the "cure" of tuberculosis; the most favorable termination of tuberculous lesions constitutes nothing more than an arrest of the process.

Hernia of the Ovary Inguinal.

Dr. Wm. P. Matthews, at the recent meeting of the Southern Surgical and Gynecological Association, reports this case. The patient, Miss I. E., aged seventeen, five feet, six inches high, weight 145 pounds, strong and robust, was born with a swelling in each inguinal region which did not occassion any alarm or produce any inconvenience until she reached her fourteenth year, when they began to enlarge and at intervals became so tender as to confine her to bed for two or three days. Pressure on them produced pain and nausea. She never menstrated. The doctor operated for the relief of the hernia, following the Bassini method. The sac was formerly adherent to the internal ring, and to the adjacent part of the canal. The sac was opened, and a tumor, inclosed in several layers of fascia, was exposed, carefully dissected out, and examined.

It proved to be an adeoma of the ovary, though it looked more like a testicle than an ovary. The specimen consisted of four distinct parts: (1) An oval flattened body, six centimeters long, three wide, and 1-3 thick; (2) A cystic tube, 5.2 centimeters long, one end of which was dilated. This was joined in part to the body by fibrous connective tissue; (3) Parallel and beneath was another tube which entered the body; (4) Perpendicular to this latter tube was a third tube which also entered the body. Upon section the body showed a grayish-red surface, with one white, well-isolated tumor. The microscopical examination which accompanied the paper was made by Dr. G. Baughman. Examination revealed absence of the uterus. The ovary was removed and the parts closed in the usual manner, and patient left the hospital in three weeks.

Inquiry into her family history revealed interesting facts. Her great-grandmother was an only daughter. She was twice married, and bore children in each union. Of the female descendants of the first marriage there were eight that were never unwell in their lives, and all lived to be over twenty years old. Of the second marriage there was one of the two daughters who was never unwell. Two aunts of the patient have never menstruated, one has a double reducible inguinal hernia. Five first cousins of the patient have never menstruated, and two of these are ruptured just as she was. One sister of the patient has never menstruated, and has a reducible hernia in the left side, an irreducible on the right. One fact he learned is that these women who have never menstruated have hardly any hair in the axilla and on the pubes and are not troubled by any unpleasant odor from the perspiation.

Frequency of Typhoid in Children.

Dr. Berg, at the New York Academy of Medicine, Nov. 14, 1901, said, according to the Medical News, it is not ten years since a specialist in children's diseases said in New York that he doubted if typhoid fever ever occurred in children under five years of age. Now we know, mainly as the result of the Widal test, that the disease is not uncommon even in very young children. If they are exposed to infection they are quite as liable to take the disease as adults. Undoubtedly the Widal test is of extreme importance for the diagnosis of typhoid. It is the most omnipresent symptom. Dr. Cabot, of Boston, has collected five thousand cases of typhoid fever in 97 per cent. of which the Widal test was positive. The Widal reaction is not of importance for the early diagnosis of typhoid fever. For this purpose the blood-count is undoubtedly better. There will often be found a diminished number of white blood-cells on the first or second day in bed with typhoid fever. The demonstration of the lowered leucocytecount is rather easy and if taken in connection with other clinical symptoms may be of very great importance in pointing out the existence of typhoid fever in a doubtful case long before the Widal reaction deveops.

Some Thoughts on the Principles of Local Treatment in Diseases of the Upper Air Passages.

Sir F. Semon, (American Medicine): Of the systematic disease in which throat

and nose complications occur, and which may require local treatment, tuberculosis syphilis, and diseases of the central nervous system, are the most important. In laryngeal tuberculosis we have to deal with a local manifestation of systemic disease, not with a purely local process, and the word "cure" should be avoided in speakfng of the results of treatment. In no disease is there greater need for individulization and for treating each case on its own merits. If there are only one or a few ulcers on the vocal cords, energetic lactic-acid treatment, combined with scraping or removal by double curette, will sometimes yield most gratifying results. Where the ulceration affects the epiglotis, the arytæno-epiglottidean folds, or the subglottic cavity, local treatment is not so easily applicable. Should intralaryngeal measures fail, external operations may be considered. Thyrectomy, with scraping and application of pure lactic acid, has worked well in a few cases; but the external wound is apt to become infected. Where the whole of the laryngeal mucous membrane is ulcerated, and there is chrondritis, caries, necrosis, and exfoliation, local measures are out of the question. Palliative local measures alone are suitable. The patient's general health and pulmonary condition have always to be taken into consideration when deciding upon the question of local treatment. It is useless in the final stage of pulmonary phthisis. As regards syphilis, the author has long ago abandoned local treatment as a routine measure in the treatment of specific affections of the upper air passages.

In functional aphonia due to central nervous disease, nothing restored the voice so quickly and certainly as elictricity. Energetic intralaryngeal Faradaisation often works wonders; but it must be energetic.

Etiology of Some Unusual Forms of Peritonitis.

Dr. B. T. Tilton (Medical Record, Nov. 30, 1901), read a paper on this subjeet at the New York Academy of Medicine Nov. 11, 1901. As evidence of the relative frequency of the chief causes of suppurative peritonitis, the following serise of cases was cited. In thirty-four it rose from perforation af the appendix; in six, from perforation of the stomach; in six, it was due to strangulated hernia; in four, to typhoid perforation of the intestine; in fourteen, the cause was disease of the gall-bladder. In the pneumococcus peritonitis of children there seemed to be a marked tendency for the exudation to be encapsulated. Operation should not be undertaken until the process had become localized. In adults, pneumococcus peritonitis was thought to be a great rarity. It is stated that pain, vomiting, and diarrhœa are the three constant symptoms in adults, and that fevnr is not observed except at the outset. Encapsulation of the exudate does not occur in adults. The presence of diarrhœ at the beginning would seem to point to the intestine as the starting point. The absence of fever is a striking point in differentiatiating this form from ordinary peritonitis,

The Treatment of "Inoperable" Cancer of the Breast.

Dr. C. H. Leaf (Edinburgh Medical Journal), says that the principle of the method is to prevent dissemination of the cancer cells and cancer juices to internal organs along the lymphatics by keeping them as near the surface of the tumor as possible, and this the author attempts to accompiish by means of suction action. He has had constructed a large vulcanite shield fitting acurately on the skin around the growth, the edge of the shield being provided with an inflateable air-cushon, similar to that of a Clover's ether inhaler, to insure accurate apposition. The surface of the shield is provided with a tap through which the air inside the apparatus can be exhausted by an ordinary air-pump. To be really effective, the apparatus should be worn continuously. Very little pain is caused. If the surface of the growth has ulcerated there will be no obstacle to the cells and juice, which are drawn to the surface, being got rid of entirely, and this is of such advantage that the author advises that ulceration be encouraged, where it is not present, by the use of hot fomentations, or even by making a breach in the skin by multiple punctures or incision. It is important to maintain absolute rest for the arm of the affected side, since every movement aids the flow of lymph from the breast through the deeper lymphatics, and thus assists dissemination. Even after an apparently successful operation for removal of a breast cancer, the author would instruct the patient to keep the arm in a sling and not to use it for at least two years. lest a few cancer cells might have been left behind, and become driven into the deeper lymphatics by movements of the arm,

The Administration of Anæsthetics in Operations about the Mouth, Nose and Throat.

R. W. Lloyd, in the Lancet, Nov. 16, 1901, recommends the use of gas in opertions of very short duration, such as the removal of one tonsil, etc. Gas followed by ether, is best in cases of adenoid disease.

Where the operation is a long one, gas should be used first, then ether, and finally chloroform throught the operation. Chloroform is best given by means of a Junker's apparatus, with the tube held in the mouth or running through the side of the mouth gag. Avoid he says dangerous and complications by inducing only a moderate depth of anæsthesia. By favorable position and sponging, if required, faciliate the removal of blood from the neighborhood of the air passages. By holding forward, on both sides if necessary, the lower jaw, this manœuvre will tend to prevent or relieve obstruction of the glottis, which may have arisen from falling back of the epiglottis and the tongue. Should difficulties arise, discontinue the anæsthetic and assure yourself on the above points; notice also the state of the complexion, respiration, pupil, and pulse. If artificial respiration is necessary, take care to have the tongue well pulled out, and perform it slowly. Should laryngotomy have been performed, thery will be no need to pull forward the tongue.

On the Removal of Great Lengths of Intestine.

A. Blayne, reports in the British Medical Journal, Nov. 16, 1901, the case of a boy, aged ten years, who was run over by a heavy wagon, the wheels, passing over the lumbar region. The intestines were extensively crushed, as was shown at the subsequent operation. The intestine removed at the operation consisted entirely of ileum, and was eight feet four and a half inches in length. The patient slowly recovered; his appetite became abnormally great, and he suffered from a tendency to looseness of the bowels, which has persisted. The author has collected from the literature thirty-three cases in which considerable lengths of small intestine have been removed. The lengths varied from three inches to twelve feet (Obalinski). In this last case the patient died in twenty-two hours. Of the case ending in recovery, the greatest length removed was eleven feet (Ruggi). Of the thirty-three cases, nine quickly died; three died in a few months; and twenty-one cases recovered. Of these recovered cases, seven subsequently showed symptoms of intestinal disturbance (diarrhœa); in all of these seven, over six feet six inches of ileum had been removed. None of the remainining cases showed any insestinal disturbance, thus pointing to the conclusion that six feet of ileum (two hundred cubic centimetres) is the maximum length which should be removed ln uncomplicated cases.

Rupture of the Urethra a Reprot of Cases.

Dr. James R. Hayden, (Medical Record Nov. 23, 1901). When there is marked hæmorrhage with retention, or bloody urine associated with inability to enter the bladder with instruments; also if there is a fluctuating perineal tumor with, perhaps, a rise in temperature, perneal section and bladder drainage are indicated. In other cases, catheterization, irrigation, and urinary antiseptiсss, should be resorted to, and watch kept for the first sign of urinary extravasation, in which event external urethrotomy with vesical drainage should be resorted to. Partial suture of the urethra should be employed when the divided ends are widely separated. Complete suture is, in general, contraindicated.

Morphine an Allied Drug Habits.

Dr. David Paulson, (Medical News, Nov. 30, 1901), at a meeting of the Chicago Medical Society, held November 20th, said that the alarming increase in recent years in the number of neurotic individuals is producing a proportionate increased demand for sedative drugs. The very fact that almost every issue of popular magazines contains nearly a dozen alluring advertisements of various remedies or institutions purporting to cure these drug habits is a strong indication that there are plenty of victims to patronized them. In order to cure permanently a victim of one of the drug habits, either the patient must be built up into such a state of health that he will have no occasion in the future to depend upon the drug, or else he must develop a fortitude to bear suffering. Unless one or the other of there conditions is established in the cure, the time spent in most instances is simply thrown away. Some idea can be had of the author's treatment by narrating one of the several cases reported by him. Physician; male; smoked ten cigars daily; used alcoholic stimulants moderately: used four grains of morphine daily; had been using morphine occasionally for many years, but constantly during the last four or five years; also used several grains of cocaine, deffinite, quantity not known. He was cut down to one-half grain of morphine the day after consulting the doctor. Treatment first day: Warm electric baths; fomentations to the spine; massage; rested quietly seven hours; slept two hours. Second day: Fomentations to the spine; stomach and liver; warm electric baths; massage; very nervous and sick; severe attacks of vomiting; injected $\frac{1}{4}$-150 grain of atropine; slept between two and three hours. Third day: Warm electric baths; massage;

fementations to the spine, stomach, abdomen and head; warm enemata; slight vomiting attack; rested and slept between five and seven hours. Fourth day: Warm electrc baths; Swedish shampoo; massage; dry hand rub; warm enemata; restless; slept between two and four hours. Fifth day: Warm electric baths; felt better; slept between five and seven hours. Sixth day: Warm electric baths; massage; fomentation to spine; read newspapers; walked about the room; rested several hours; slept a few hours. Seventh day: Hot electric baths; wet sheet pack; cool sponge; rode in street car; strength good; mind clear; slept between five and seven hours. Eighth day: Similar treatment as before; wakeful and restless; sleep but a few hours. Ninth day: Spent most of the day outdoors; took two doses of sulphonal on his responsibility; slept from fiive to seven hours; spray in the morning after rising; felt quite well. Tenth day: Sedative treatment in bathroom; dismissed his night nurse; took sulphonal. but did not sleep. Eleventh day: Took sedative treatment in the bathroom; ate a few apples; and slept one hour and a half. Twelfth day: Tonic treatment; slept six hours. Thirteenth day: Same treatment; slept seven hours. Fourteenth day: Same treatment, and slept from four to six hours; gained strength. Fifteenth to the twenty.fifth day: Gained ten pounds; then went away feelieg well pleased. One year later, a private letter from patient stated that he was well, hapy, and an attending to a large practice.

A Successful Case of Laparotomy for Perforation of the Bowel in Enteric fever.

J. Wilkins and F. Villp, Metropolitans Aylum Board Reports, 1900, (Treatment Nov. 1901). Very faw successful laparotomies for perforation in enteric fever have so far been put on record in this country. This is to a great extent due to the difficulties of making a diagnosis sufficiently early, and before a general infection of the peritoneum has taken place. In this case the perforation took place on the eighteenth day of the illness. Only slight indication, of peritonits were present at the operation, the coils of bowel being slightly attached to each other. The perforation was a minute one, and was treated by invaginating the ulcer in a direction transverse to the long axis of the bowel and inserting six fine Lembert sutures. No peritoneal toilet was made, and the abdominal opening was completely closed at the time of operation. The after-history of the patient was uneventful, and the wound healed by granulation within six weeks. A point of interest was the early state of the peritoneal inflammation, together with the absence of fæcal extravsation The opening may have been closed temporarily by adhesion to a neighbouring coil of bowel. One sees occasionally patients who present for the time being all the symptoms of peritonitis, but in the course of a few days these disapear, and a gradual improvement takes place. The cases described above suggests an explanation that the symptoms may be due to a plastic peritoneum through the thin base of an ulcer, and that the adheisons thus formed proved adequate to the needs of the case, and that recovery then ensued.

An Important Ruling Concering a Physician's Fees.

A very important ruling was made by Judge Armstrong at Camden, N. J., on August 2d, (New York Medical Journal). Dr. Godfrey, who had attended a woman for four years, put in his claim as a preferred creditor for $349 against her estate, after her decease. It appeares that the patient had been suffering from Bright's disease, and while under Dr. Godfrey's care had been recommended by him to go to Bedford Springs, where she died. While she was there another physician attended her. The claim made by the defendant estate that not Dr. Godfrey. but this other physician, who was called in at the last, attended the patient in her last illness, and that, therefore, Dr. Godfrey had no *locus standi* as a preferred creditor. In this point of view the court very properly, as it seems to us, declined to concur, but ruled on the contrary, that Dr. Godfrey did attend the woman in her last illness. It seems to us to be clear that as the attendance was continuous over the period of the illness which ended fatally, until the patient at Dr. Godfrey's advice, went to Bedford Springs, her being there was in fact part of the treatment prescribed by him, and unless it could be shown that the patient had actually dismissed him after going there, it must reasonably be assumed that she continued to carry out his treatment in general, notwithstanding the presence of another physician, whose attendance should be regarded in the light of auxiliary aid in an emergency, much as would be the case were the nearest physician summoned, say, in an attack of hemoptysis, when the doctor under whose continued care a tuberculous patient was did not hapen to be at home. Surely-both physicians in such a case would be properly held to have been in attendance during the last illness.

Mortality of Appendicitis

John B. Deaver (Journal of the American Medical Association, Oct. 5, 1901).

In cases not subject to surgical treatment by far the largest factor is septic peritonitis. This arises in one of the several ways: 1. Transmigration of micro-organisms from an ulcerative or interstitial appendicitis without rupture of the appendix; 2. Gangrenous appendicitis, or rupture of the appendix by ulceration, without adhesions localizing the septic area; and 3. Internal rupture of a peri-appendical abcess. Another quite common termination is an obstruction of the bowel, either by adhesions of the appendix to neighboring small intestines, or by the bands of adhesions thrown out in nature's efforts to localize a septic area. These factors are responsible for the greater number of deaths in non-operative cases. Other complications frequently seen are the deposit of septic material in distant parts of the body, as liver, lungs, brain, heart, etc. Rarely an abcess ruptures into the bladder, causing a fatal cystitis or pyelitis.

Of the four main localities of appendiceal abcesses, that situated to the outside of the cecum gives the most favorable prognosis. The next favorable variety is that situated anterior to the cecum and directly under the abdominal wall. Next in order are collections of pus in the pelvis. Most dangerous of all are local collections of pus. one to the median-line side, whose walls are made up principally by small intestines. Post-cecal collections offer a serious problems to the operator. If pus is not localized there is no hope of recovery unless by operation in first hour or two, when only serum is infected. The appendix shold be removed except under very exceptional circumstances, thus rendereing less likely the possibilities which are active factors in appendiceal mortality—fecal fistula, an undiscovered secondary collection of pus, subsequent attacks and danger of subsequent necrosis an obstruction of the bowel.

In 118 cases operated upon during acute stage and followed by recovery, in sixty-one pus was present. Of this number the appendix was perforated and gangrenous in two cases; two cases had perforation without gangrene; in twenty-five cases infection occurred by migration of micro-organisms through the walls ot the appendix, and in thirteen cases recorded fails to show condition appendix. In the remaining fifty-seven cases the inflammation was confined to the appendix. In six cases fecal fistula occurred, four of which closed spontaneously, two requiring subsequent operation. There were fifty-six cases operated upon in first attacks, and in remaining sixty-two cases there was an average of four attacks. Of eleven cases of acute appendicits not operated upon, three died, five left with a mass in the right iliace fossa, and in three the lesions were apparently confined to the appendix. One attack predisposed to another attack, and barring rare cases of obliterating appendicitis, each attack renders operation more difficult on account of adhesions and their tendency to denseness and contraction, thus detracting from a favorable prognosis.

The character and severity of attacks is of great moment and must be duly considered in the question of appendiceal mortality. It may be laid down as an axiom that the danger of death in acute appendicitis increase in direct ratio to the area of peritaneum involved in the septic process.

Complete Uterine Prolapse.

Wiggin in the New York State Medical Journal believes this condition should be described as a reducible hernia through the pelvic floor, the sac being formed by the inverted vagina, containing besides the uterus, tubes and ovaries, a large portion of the small intestine, the bladder and rectum. It is caused by seperation of the tendons of the muscles forming the pelvic floor where these unite in the median line, occurring usually during parturition. The malposition of the bowel is more or less increased by lifting heavy weights and by defecation and perhaps is hastened by added weight of the small intestines which find their way to the lowest point. The complete form of this does not, as a rule, appear until late in life, but it causes much discomfort for many years before and the unsatisfactory permanent results as the various operations are due largely to the failure in recognizing the fact that the vaginal wall is practically a hernial sac with other contents than the uterus and appendages, and that consequently simple repair of the external perineal body, and the removal of a larger or smaller portion of the vaginal walls of the uterus itself would not correct the greatest trouble, malposition of the small intestines. The treatment requires, an operation to obliterate the hernial sac in the inverted and stretched vaginal wall and a restoration of the damaged perineal structures to their normal position as nearly as possible. The patient is placed on a bed the end of which is raised six inches. Tampons moistened with glycozone are put in position. The parts are treated until all ulcerations are healed, the general condition

being carefully looked after. A laparatomy is then performed in the Trendelenburg position to aid in drawing the bowels out of the way. They are usually found more or less attached to the peritoneal lining of the vaginal wall by adhesions which must be broken up. The uterus, which is usually small, is found and pulled upward by bullet forceps, thus drawing upward also the attached vaginal wall. When this has been accomplished a needle armed with kangaroo tendon is passed through the fibres of the uterus about the point of atthachment to the round ligament, and is carried up anddown the broad ligament in the form of a purse-string suture, the needle being finally made to emerge at the point of entrance, so that when the two ends of the sutures are drawn upon, the board ligament on that side is forced up and drawn together so that the excessive length is done away with, and the uterus has a new point of attachment near the insertion of this ligament to the pelvic brim. The same process is repeated on the opposite side, the abdomen is flushed with saline solution, a quantity of which is left in, and the abdominal wound closed rapidly in the usual manner. The patient is again is placed in a bed the foot of which is slightly raised, and after the wound has healed and the patient fully recovered, four or five weeks later, a new operation is performed to bring together the separated tendons of the perineal mucles with submucous sutures of catgut or kangaroo tendon. It will be found that the time of the second operation after the first one has been properly performed, that the redundant vaginal walls have practically disappeared.

The Open-Air Treatment of Consumption.

Alex. Pentland, (The Australasian Medical Gazett, Oct. 21, 1901), believes that the open-air treatment of consumption in sanatoria has hardly yet found its place in a well considered scheme for the prevention of tucerculosis. On the one hand it is pointed out that 80 or90 per cent. of the cases go out improved or cured. Out of 6,000 cases treated in some 20 sanatoria in Germany for an average of three months, 87.7 per cent. were dismissed as cured or improved, 3.1 per cent. were worse, 0.5 per cent. died, 74.5 per cent. were able to work partly.

On the other hand, it is shown that we could never hope to provide for more than a fraction of our consumptives in sanatoria, and that the effects of the treatment are, so far, not very lasting. Out of 1,660 cured or improved cases who admit of being traced, four-fifths were still at work after six months, but after four years four-fifths were dead or unable to work. Out of 373 of these with cavities after four years none were able to work. Out of 863 with consolidation only 16.7 per cent. were able to work after three and a-half to four years, but 44.4 per cent. of tee very early cases were still able to work after three and a-half to four years, and this though half the cases were of under one year's standing when admitted.

Seeing, then, that so many improve under an open-air treatment of a few months, and I think we may grant that these patients go out not only better for the rest and food, but with their lungs in an improved condition. Why do such a large proportion relapse so suddenly that after a very few years only a small proportion are alive and able to work? The reason is evidently that while rest and treatment are able to subdue the actively progressing tuberculosis something further is necessary to fit the patient to meet the vicissitudes of ordinary life. We must go a stage farther and harden the patient to work while still undr healthy conditions. To make the treatment of real value for poorer patients we must get the patients early, keep them longer under treatment, find open-air occupations for teem when dismissed, and keep them under observation after dismissal. The time spent in a sanatorium has an an educational value, and to enable the poorer patient to profit by it, it is necessary that he should be placed in a position where he can practice what he has learnt.

I cannot see why an agricultural colony should not be worked in conjunction with a sanatorium, where puoltry farming and fruit growing might be made to pay a portion of the expenses. The larger part of the work about the sanatorium would be done with advantage to the patients themselves by the inmates; they could as they improve be drafted to the farms, and finally a bureau could be utilized to find suitable occupation for those fully able to work. To make this possible in a country like Australia, where rich endowments are not to be looked for, but where suitable land should not be hard to get, the buildings should be simple, and fortunately the simplest have been found to answer best.

British sanatoria are generally on the small pavilion plan of one or two storeys each, containing from 12 to 20 patients' rooms; the bed-rooms as a rule are neither large nor lofty (1,200 ft. cubid space), with a well ventilated passage on to which the doors open from the bed-rooms, the passage having windows, say, opposite each bedroom door. Verandahs are as often absent

as not; an administrative block, with dining-room for, say, 50 patients, kitchen and servants' rooms, and a detached house for a medical man. Open-air shelters can take the place of winter gardens and rest verandahs. The best shelters I have seen cost $80 each, and could be used in summer as sleeping shelters each containing two beds. As regards heating and lighting, most English sanatoria have some form of radiators, but they seem very seldom to use them in the winter. The electric light is owing to the free currents of air in the wards and shelters, very convinient.

Such a sanatorium as I have descrbed, with wooden buildings, should cost under $10.00 a bed. Elictric light and hot water throughout would add not more than $2.50 per bed to this sum. Under such a schme instead of accumulating all consumptives in one locality, each district should look after itself, the various councils or corporations maintaining beds, and many of of the inmates could pay something towards their own support,

We have so many places in which the open-air treatment could be carried out that it is not necessary to say much about the proper situation for such a colony. The winetr climate is suitable both in the dry inland districts, in New England, on the Blue Mountains, or in the southern highlands. The point to choose a suitable summer climate, and not to be afraid of the winter anywhere if sheltered from the prevailing winds. Too much has been said about the unsuitability of the coastal regions in Australia. Most cases of consumption would do better, I am convinced, during the summer in a well chosen position on the coast than in the dry inland districts. Dust is harder to guard against than rain. The main thing is a bracing situation; if a bracing climate does not agree, the case is not likely to suit out-door treatment.

Historical Note on Small-pox.

Dr. James Tyson, (Philadelphia Medical Journal, November 23, 1901) notes the fact that inoculation of small-pox with a view to securing immunity from subsequent attacks, was introduced in England in 1718 by Lady Mary Wortley Montague, the wife of the British Ambassador to Turkey. It was, however, practiced for centuries previous to this in China and other Asiatic countries. Jenner's Inquiry into the Causes and Effects of the Variolæ Vaccinæ, illustrated by four plates, was published in 1798, and, within a year or two, vaccination became general over the continent of Europe. Vaccination was introduced into the United States on July 8, 1800, by Benjamin Waterhouse, professor of physick at Harvard University, who vaccinated his own children. President Jefferson was instrumental in introducing vaccination into the Southern States.

Widal in Typhoid in Children.

At a recent meeting of the New York Academy of Medicine Dr. Milton A. Gershel read a paper on the value of the Widal reaction in children as illustrated by cases seen in the service of Dr. Koplik at Mt. Sinai Hospital. (Medical News November 30, 1901). Typhoid in children in the hospital experience runs an atypical and often an anomalous course. The temperature curve is not imfrequently irregular, the spleen is often enlarged, and, besides, enlargement of the spleen is not significant in children as in adults, because it occurs whenever rachitis exists or in intestinal disturbances generally. The method of applying the Widal test at Mt. Sinai Hospital was to determine whether agglutination of the bacilli took place when the blood was diluted to the extent of one to twenty. If there were still doubts, then the test was repeated with a dilution of one to fifty. Dried blood was used in all cases. except where the clinical conrse of the case aroused serious suspicions of typhoid and yet the Widal test continued to be negative. In somewhat less than half the cases typhoid fever in children ran the usual course. In the remainder it was suspected that other diseases were present. Among these were such conditions as tuberculous meningitis, or peritonitis, certain cases of pneumonia, and some seemingly simple intestinal conditions. In only 36 of over 100 cases was the Widal reaction positive at a first examination. Thirteen per cent. of the cases gave the reaction before the seventh day of the fever, 46 per cent. before the fifteenth day and 85 per cert. before the twenty-fifth day. In more than half the cases, therefore, the Widal reaction left the diagnosis in doubt until well on in the third week.

The Vexed Question of Vaccination. What is the best Method of Securing Good Immunity from Small-pox?

Dr. Charles Good, in the American Medicine suggests that, in view of the differences of opinion that prevail among medical men, it would be well if Congress were to appoint a commission to take evidence and deliberate on the whole subject, with the object of authoritatively answering certain questions and, so far as possible, laying down rules for the guidance of those whose duty it is to conduct vaccinations, or

who may be called upon to deal with an epidemic. This commission might be headed by representatives of the medical services of the army and navy, and among its other members should be men selected on account of this special fitness by the leading medical bodies of the country.

Bovine Tuberculousis and Milk Supplies.

H. L. Russell, (Philadelphia Medieal Journal, November 16, 1901) points out that, though our knowledge at present is not above controversy, it is desirable that restrictive measures should be maintained with sufficient rigor to insure freedom from all possible danger, even though, in the future, such measures may be found to have been too onerous. There is ample evidence that milk may possess infectious properties for auimals and still be derived from cows that show no apparent symptoms of disease. We need, however, many additional data as to the prevalence of the tubercle organism in milk, before the relative distribution of the germ can be at all accurately determined. In this work for accuracy, animal experiments should take precedence over microscopic examination.

The Value of Throat Cultures in Diphtheria.

An early accurate diagnosis can be made by the use of cultures and the demonstration of diphtheria bacilli in the culture. It is well to remember that (1) true cases of diphtheria may have few or no clinical symptoms; (2) cases of amygdalitis or pharyngitis may have severe symptoms and be serious, but not true diphtheria, and consequently not able to transmit diphtheria; (3) a diphtheritic exudate may be easiiy detached and leave no bleeding surface; (4) an exudate due to organism may be a true membrane impossible to detabh from the mucous membrane. Cases in point are given. The necessary equipment for microscopical diagnosis is (1) a good microscope with an immersion lens; (2) culture tubes of blood-serum; (3) an oven with a thermostat; (4) stains, cover-slips, and slides; (5) ability to recognize diphtheria bacilli when present.

Enormous Hypertrophy of the Prostate in the Absence of Testicles since Early Infancy.

J. E. Miller, M.D., of Rogerville, Tenn. reports this interesting case in the International Journal of Surgery. He says in August 1901, I was called to see B. C., a confederate veteran, sixty-five years old, who had suffered from retention of urine. His general health had been fairly good up to two years ago, when he began to suffer from cystitis. I found him with an overdistedded bladder, and on account of laceration of the urethra and false passages resulting from unsuccessful attempts to introduce a metal catheter, it was found necessary to relieve him by suprapubic cystotomy. I found his bladder a veritable cesspool, owing to the decomposition of the residual urine, together with the blood from the prostate which had been wounded in the catheterization, and the existing sepsis rendered his condition very grave. He rallied very well from the operation, and under the use of permanent drainage is making a good recovery.

The curious part of this case is that the patient had an enormous concentric hypertrophy of his prostate, the middle lobe filling perhaps one-third of the area of the normal bladder. In early infancy he had both testicles crushed by an injury, which resulted in their complete destruction. There is not a vestige of testicular tissue to be found now; the cords can be felt in the canal, ending in little masses of connective tissue, less than a small pea in size. The scrontum is infantile and has undergone atrophy.

The author believes this case tends to disprove the theory that there is some relation betweon enlarged prostate and the testicles, and that atrophy of the prostate follows the removal of the latter. This man had no signs of testicles since early infancy, and yet he had a most enormous hypertrophy.

Industrial Sanatorium in Colorado.

The RockyMountain Industrial Sanatorium, organized by Denver professional and business men last spring, is now in operation. (Medical News, Nov. 30, 1901.) On a ten-acre tract, five miles from Denver, fifteen or twenty patients in the early stage of consumption are virtually taking care of themselves. The rules of the institution compel a continuous outdoor life to be maintained summer and winter. Each patient is provided with a roomy tent, plenty of warm clothing and blankets, and a small stove to be used only in extremely cold weather. Experience has proved that with proper food and clothing, and a life in the open air and sunshine, artificial heat is unnecessary, and becomes absolutely unbearable to the patients, who without exception are gaining rapidly. The hope of the physicians and others interested in the enterprise is to form a colony of all consumptives who come to Denver, and thus take them off the streets of the city, and out of the hotels and boarding-houses, where they

could never recover, and where they are a constant menace to the public health. While no one is allowed to profit, the institute must be self-supporting. The co-operative idea has already been put into force, for many of the patients are supporting themselves wholly or in part by doing the work on the premises. Margaret S. Dunne, who received high commendation for her work in army hospitals during the Spanish war, is superintendent.

Rheumatic Fever in Relation to the Throat.

St. Clair Thompson (Laryngoscope, Jan. 1901) says that the present state of our knowledge on the relation of tonsillar affections to rheumatism may be summarized as follows: 1. It is undoubted that a certain number of cases of acute rheumatism are preceded by an angina in a proportion varying from thirty to eighty per cent. 2. Both rheumatism and angina have many etiological points in common—season of the year, cold, wet, fatigue, depression, vitiated air, etc. 3. The connection of angina and rheumatism, though undoubted in a number of cases, is not yet clearly established. 4. The tonsil may be the port of entry of the rheumatic virus, and this even although the naked-eye appearance of the throat gives no indication of its being affected. 5. The particular affection of the throat which is associated with rheumatism is not yet established. Apparently it is not yet peritonsillar abscess (quinsy). 6. Peritonsillar inflammation does not appear to be arrested by the administration of anti-rheumatic remedies. Many cases of parenchymatous and lacunar tonsillitis, on the contrary, are considerably benefitted by the administration of salicin or salicylate of sodium. That this action proves the rheumatic nature of the disease cannot yet be accepted. 7. The question requires further ressarch in two directions: one in difierentiating the various forms of angina, and settling the one which is associated with rheumatism; the other in further research to discover the true nature of rheumatism.

A Judicial Decision Favorable to Vccaination.

According to the New York Medical Journal, Nov. 23, 1901, the committee on hygiene of the Philadelphia Board of Education suspended a teacher on the ground that she had declined to present a certificate showing that she had been vaccinated within five years as required by the board. The teacher took the matter into court, asking that an injunction be issued restraining the board from suspending her. A deeision has been handed down by Judge Arnold refusing to grant the petition, in the course of which he says; "As school directors may, in the exercise of a sound discretion, exclude from the public schools pupils who have not been vaccinated, as was decided by the Supreme Court in the case of Duffield vs. the Williamsport School District, 162 Pa., 476 (A.D. 1894), so may they exclude teachers and other employees for the same reason. * * * The law applicable to cases of this kind is the ordinary law of master and servant. If a servant disobeys the reasonable orders of his employer, he may be suspended or discharged. In the present case the plaintiff has refused to comply with a lawful regulation of the board of education, and, therefore, is subject to suspension and dismissal."

Infection in a General Surgical Sense.

Dr. Daniel N. Eisendrath concludes an article in American Medicine as follows:

1. Ample incisions to lay bare every portion of the infected area, and counter incision to relieve the collateral œdema; 2 general anæsthesia and a bloodless method of operating whenever possible; 3 the disinfection of an infected wound with strong antiseptics, etc., is of little avail and may do great harm; we should place most dependence upon free drainage and moist antiseptics; and no powder should be used until granulation is well established; 4 absolute rest and elevation of the infected erea; 5 after-treatment by secondary suture and early active and passive motion; 6 general treatment: strychine, whiskey, and attention to the excretory organs.

Amaurotic Family Idiocy.

Dr. Sara Welt-Kakels, at a recent meeting of the Pediatric Section of the New York Academy of Medicine, presented a boy, 1 year old, born of perfectly healthy parents. There were four children in the family. The first child was said to have been hydrocephalic; the second was now 5 years old and perfectly well, and the third child, 3 years old, was also perfectly healthy. The little one presented this evening was born after a normal labor and was only slightly asphyxiated for a moment. He is rather plump; the eyes have a vacant stare and there is slight strabismus on one side. The child does not seem to notice anything and tbe pupils react very sluggishly to light. He starts at any noise; he cannot hold the head up and does not move the lower limbs. The deep reflexes are quite exagerated. Dr. H. Knapp, who examined the eyes, reported that the optic nerves are pale and the area around the fovea centralis distinctly but not intensely opaque. The opacity does not extend beyond the macula.

He was not able to find any other changes in the fundus. According to Sachs, the following are the chief features of this disease: (1) Defective mental development; (2) weakness of all the muscles, terminating in paralysis; (3) gradual loss of sight np to total blindness; (4) marasmus, usually before the end of the second year. Apparently the entire nervous system is affected.

New Modes of Medical Advertising,

The editor of Pediatrics gives the lewd reprint sender about what he deserves. He says:

Up to a year or two ago the sealed envelope containing a pharmaceutical advertisement was the worst bore that came to the physician's desk through the medium of the mail carrier. Since then it is quite noticeable that while the articles mentioned have not diminished, they are now more apt to be accompanied by sealed or unsealed reprints of notable special articles by notable specialists on all special subjects under the sun. "Orificial surgery" is a favorite specialty, it seems, and the orificial surgeon appears to be in the habit of taking the New York Medical Directory and posting one of his reprints to every name and address in the book. Now, though the gentlemen in question *may* be actuated only by the noble and worthy purpose of disseminating scientific knowledge, certain lewd fellows of the baser sort have more than hinted that he simply desire self-advertisement and consultations. "We know not how the truth may be," but when these papers come by post morning, noon and night, on all possible and impossible medical subjects, from gentlemen whose names we never heard of before and may never hear of again—is it it not time to call a halt!

To send reprints of one's wrintings to one's friends and acquaintances is always correct and often a grateful task. Such reprints should be always acknowledged by the recipient as a mere matter of courtesy. But if the privacy of one's professional life is to be continually invaded by unasked and undesired and usually unscientific communications from any ignoramus in the city who chooses to call himself a specialist, we think it desirable to remonstrate; and if remonstrance be not sufficient it might be well to talk of discipline.

Prophylaxis of Smallpox in Cities.

Richard A. Cleemann (Philadalphia Medical Journal, Nev. 23, 1001) states that the duration of immunity from smallpox secured to the individual by a single vaccination is estimated on good authority to be from eight to twelve years. There should be as general a vaccination as possible by a corps of vaccinators, who should be educated physicians under the order of the health authorities. Discrétion should be observed with regard to weak children and sick persons. The operation should be avoided generally in hot weather upon infants less than two years old on account of the possible complication of cholera infantum. A child that cannot furnish a certificate of successful vaccination should be prohibited from attending any school or institution where children are received. Vaccination should be made a prerequisite to entrance into the civil service, the army, the navy, and the militia. No immigrant should be allowed to land on our shores unless thus protected from smallpox. When the disease actually appears in a community, the most thorough precautions should be taken. The case should be reported immediately to the health authorities, who at once send a medical inspector with a vaceinator to verify the diagnosis, and in this event all unprotected persons in the environment of the patient are vaccinated. The origin of the disease should be traced and reported. The patient with the rest of his household should be removed to a hospital devoted to care of smollpox cases, where they are to be detained until the vaccinations prove successful or until they remain well for two weeks. The room and all its contents should be thoroughly disinfected. If the patient is living in his own house, and insists on remaining, guards must be placed before the door to insure that no one but the physician goes in or out. The utmost precautions must be observed to prevent any possible spread of the disease. Should the patient die, the body is to be wrapped in a sheet saturated with cerrosive-chloride solution, and preferably cremated. The remains may be encased in a hermetically sealed metallic coffin and carried, without a public funeral, to the grave.

Sarcoma.

Wyeth, in Annals of Surgery, Sept. 1901, calls attention to the extremely malignant character of sarcoma as shown by its frequent recurrence. Out of 5 cases amputated at the hip-joint for sarcoma, only 1 is living a sufficient length of time after the operation to be considered cured. This patient is now in the fourth year without any sign of recurrence. In reviewing the literature of amputation at the hip-joint by his method, he finds that 131 operations have been done on account of sarcoma, 117 patients surviving the operation. A more or

less satisfactory history of the cases was obtained in 83; in 51 the disease recurred, ending fatally, making a percentage of 63 per cent. No doubt in the large majority of the other cases the ultimate result will be death. Proximity to the line of incision in forming the flaps, the limitation of the disease to the bone or slight involvement of the soft parts has little if any influence upon the ultimate safety of the patient. As an example of this, he mentions the case of a man who was operated upon for osteosarcoma at the great trochanter, which by periosteal extension had infiltrated the soft parts as high as the obdurator foramen, from which a very considerable mass of sarcomatous material was curetted at the time of operation. This patient is now living in the fourth year after operation. In another case the conditions seemed to be ideal. The tumor, an osteosarcoma, was confined to bone just at and above the condyles of the femur, with fully 16 inches from the upper limits of the mass to the hipjoint. In this case the patient survived the operation only 12 months, dying from recurrence in the lung, the stump remaining uninvolved. In reviewing the causes of death, recurrence in the lung seems to be far the most frequent. In 33 out of 53 cases the recurrence was in the lung, and only 10 times in the stump; in the remaining 10 cases various organs, no two alike, were involved. In his successful case, he believes that the patient's life was prolonged by Streptococcus infection. In this case the wound was loosely packed and allowed to become thoroughly infected. He is of the opinion that this method should be adopted in all cases, whether they are operable or not. He advises that infection should be introduced and repeated at frequrnt intervals, no longer than 6 months, for at least 6 years following the operation, and believes that lives may be prolonged or even saved by this method.

Acute Intestinal Obstruction Following Appendicitis; a Report of three Cases Successfully Operated Upon.

L. W. Hotchkiss, (Annals of Surgery, November, 1901) recommends the following procedures under given conditions. 1. The great utility as well as necessity for the free use of the decinormal salt solution whether into the subcutaneous tissues, the rectum, or the veins, both during as well as after operation, as a guard against extreme shock. 2. The great value of free incision into over-disteaded coils of gut (*a*) in order to relieve upward pressure upon the diaphragm, and the disturbance of respiration and circulation consequent upon it; (*b*) to relieve the congested intestinal vessels, and to diminish the size of the enormously distended coils so that they may be handled without injury, and the obstruction more easily located and dealt with, as well as at the same time to drain away from the interior of the gut a great quantity of stagnant fluid before it can reach the absorbing surfaces of intestine below the obstruction. 3. The practicability and desirability of closing the abdominal wound without attempting to drain the peritoneum, and the leaving within the cavity sufficient saline solution to float the intestines and assist, perhaps, in their rearrangement. The postoperative treatment of these cases, especially if they have been brought late to operation, is of vital importance, and upon its intelligent and diligent application the patient's fate depends. The three measures which are essential are simple but generally effective. They are: 1. The persistent and intelligent use of the stomach-tube, with lavage. 2. Early and if necessary, the repeated administration of saline purges in concentrated solution, and introduced through the stomach-tube if retained no other way. 3. The use of the rectal tube for the relief of gas, and the patient and persistent use of high enemata. Those three measures intelligently, patiently, and perseveringly employed, together with absolute abstention from the use of morphine, no matter what the temptations may be to use it, constitute the tripod upon which rational and effective treatment is based, and upon the intelligent use of which the life of the patient often absolutely depends.

Repair of a Complete Laceration of the Perineum in a Girl of Nine Years.

Dr. H. A. Royster, of Raleigh, N. C., at the Richmond meeting of the Southern Surgical and Gynecological Association described a case of a will-nourished girl of nine years. At her birth her perineum was torn completely through the recto-vaginal septum, and the explanation of this occurrence is stated to be as follows: The child's grandfather, a very aged physician, acted as accoucher. Owing probably to dimmed eyesight and infirmity, a breech presentation was evidently mistaken for a vertex position, and the obstetrician, introducting his finger into what he thought was the child's mouth, but which was really its vagina, exerted traction and the result was a complete laceration of the baby's perineum. No immediate harm came from the accident, and it was resolved not to attempt a restoration of the injured region until the

girl was considerable older. The parts showed a quantity of dense scar tissue. The tear extended into the vagina to the depth of a half inch, and the sphincter ends were plainly seen on either side. No incontinence of feces had occurred. On November 15, 1900, under chloroform anesthesia, a butterfly-shaped denudation was made in the vagina and the exposed edges of the rectum pared, taking pains to dissect out the torn sphincters. The rectal tear was then united with catgut sutures, which were tied inside the bowel and cut short. Silkwormgut was used for closing the vaginal surfaces end bringing together the ends of the sphincter muscle. Perfect apposition was obtained and rigid asepsis observed in all the details of the technic. In spite of these precautions only partial success resulted, due to the fact that the patient's bowels became unmanageable just at the beginning of the operation, and the denuded area was constantly and unavoidably bathed by a stream of feces. This unlooked-for disaster was brought about by faulty preparation of the patient before admission. A purgative had been administered the day before, and on the morning of the operation an emema was given, with the report that the bowels had been thoroughly emptied. The continual discharges were a source of much annoyance, but having begun it was considered best to complete the operation. At the end of two weeks it was found that the external sutures did not hold, although union of the under part of the denuded tissue was secured. A second operation was attempted April 18, 1991. The same method of procedure was employed, but modified to suit the changed relations. The child was prepared under direct personal supervision, and no fecal contamination occurred. The parts healed promptly, and the result was perfect. The author could find no parallel to this case in the literature of the subject.

MISCELLANEOUS.

Dr. Rixey to be Promoted.

President Roosevelt has informed Mrs. McKinley, through Secretary Cortelyou, that, in pursuance of the intention of the late President McKinley, and in recognition of devoted services, as well as because of eminent fitness, Medical Inspector P. M. Rixey will be appointed Surgeon-General of the Navy upon the resignation of the term of Surgeon-General Van Reypen. The Secretary of the Navy has been requested by the President to instruct Dr. Rixey to make such arrangements as will enable him to continue, if needed, his care of Mrs. McKinley between now and the time of his appointment to his new position. The naval list shows that Surgeon-General Van Reypen will not retire in the ordinary course until Nov. 14, 1902. Dr. Rixey stands number twenty-eight on the list of naval surgeons. Though Surgeon-General Van Reypen's retirement from active service does not occur for more than a year, his commission as Surgeon-General, which was for a period of four years, will expire December 18, and Dr. Rixey's appointment may be expected then. Dr. Rixey has been Mrs. McKiney's physician since the beginning of the Spanish war, when Dr. Lenoard Wood, who up to that time was her medical attendant, went to the front as Colonel of the Rough Riders. He is well known in Washington, having been born in Culpepper, Va., hardly fifty miles away. His brother, John F. Rixey, who, lives at Culpepper, represents the Eighth Virginia District in the House of Representatives. The family is an old one. Dr. Rixey has been in the navy twenty-seven years, having graduated from the Medical Department of the University of Virginia in 1873 and the Medical Department of Pennsylvania two years later. The following year he received a commission in the navy as assistant surgeon. He ranks high as a surgeon, and has endeared himself by his fidelity and trustworthiness to the President's family. He not only attended Mrs. McKinley, but the President, and carried him through his severe illness last winter. Dr. Rixey was with the President and Mrs. McKinley throughout the trip to California, and the President attributed to his skill and good judgment the remarkable recovery which Mrs. McKinley made.—*Milwaukee Medical Journal.*

Gelatine Injections in Aortic Aneurisims.

K. Barth (Munch. Med. Woch.) describes a case of aneurism of the ascending part of the aortic arch, which he treated with Lancereaux's gelatine injections. The patient was 50 years of age, and showed a past history of pertussis at four years, leaving chonic cough and narrowness of the chess; at 17 he had some glands removed; at 18 he suffered a fracture of his right "leg" (bone not named); at the age of 24 he went to America, and there had two attacks of malaria, two attacks of pneumonia, and one of pleurisy (both the chest conditions on the left side), and at the age of 48 he fell from his horse and lay under the horse for a short space of time. The front

and right side of his chest were hurt, and subsequently "tumor" formed in the right lower region of the chest, which was treated surgically. From the date of his fall he had symptoms of intrathoracic trouble, and a year before the treatment was undertaken he noticed a swelling in the right intraclavicular region. The signs and symptoms at the time of treatment were slight cyanosis of cheeks and lips, enlarged veins in the upper thoracic wall; radial pulse soft, and right pulse a little smaller and later than the left; a swelling in the right intraclavicular region was well marked and showed pulsations. The dulness extended equally in all directions, and measured 4 1-3 inches in diameter. There was some indistinctness of the breath sounds in the neighborborhood of the tumor. Bronchitis, trachetis, and emphysema were found to be present, and in the heart, besides a mitral insufficiency, with dilatation of the right and left ventricle, the second sound was accentuated everywhere. There was a loud systolic murmur to be heard all over the cardiac area and over the swelling. He complained of pain in chest and right arm. The injecions of gelatine were carried out with all aseptic precautions, and caused no local or general inconvenience; 15.4 grains were injected in solution (1 per cent.) every other day at first. Twelve such injections completed the first composed the first course, and rest in bed, sodium iodide, Leiter's "cooler," and restricted diet were combined with it. Later on a scecond course was called out The examination after the last showed that the dulness had shrunk to an area measursing 2.34 inches by 1.95 inch; the swelling felt firmer, and was not so prominent, nor did it pulsate as visibly. All other signs were less marked, and the subjective symptoms (pain, discomfort, inabibility to make any exertion) had completely disappeared. Barth proposes shortly to apply a third course.—*British Medical Journal.*

A Remedy Proposed for the Evil of Substitution.

By J. D. Williams, M.D., New York:

There can be no subject of more importance to physicians than the violation of their confidence on the part of a dishonest dispensing druggist. Law will not make a dishonest man honest, but the right law properly executed will prevent a criminal's further infliction of injury upon society. The requirement of a license to all druggists who dispense drugs or medicines, revokable upon the licensee's being convicted of substituting any ingredient drug or medicine other than, and in lieu or instead of, that specified in the prescription, order or request in writing, of any physician, who go a long way to aid in the matter of honestly filling prescriptions. Let the medical societies induce their respective State Legislatures to enact a law requiring such a license, with a simple and practical procedure for establishing the guilt and enforcing the penalty against infraction, and the practice of substitution would soon cease.

Let proceedings for revocation of license be before the court, board, or officer, empowered to issue the license, and be set in motion at the relation of either the Board of Health, a local medical society or the purchaser upon whom the fraud and imposition had been done, or of the physician by whom the prescription or order was issued or given, of any person, firm or corporation for whose brand or make of drug or medicine the substitution had been perpetrated. Let the licening board, court, or officer be empowered to issue citations, subpenas for witnesses, to administer oaths, and be given all other requisite powers for duly trying the issues and revoking the license of the guilty.—*Exchange.*

Case of Large Renal Calculus Detected by Radiograph; Pyuria without Hœmorrhage; Operation; Recovery.

Dr. Robert Abbe presented a man thirty-two years old who had an attack of right renal colic nine years ago. His symptoms at that time were relieved by a fly blister, and there was no recurrence until two years ago, when he sufferred from intermittent pain in the region of the right kidney, which lasted for three weeks. There was no blood in the urine. Again, during the past six months he had had a recurrence at times, and more recently the pain had been quite constant. His urine had appeared muddy for a year. He had been losing flesh. but he had had no fever so far as he knew. Examination showed a large movable tumor in the right hypochondrium, which felt like a renal sarcoma. The pyuria suggestod a tuberculous kidney but repeated examinations of the urinary deposit failed to reveal tubercle bacilli. A radiograph showed a large branching calculus with two separate pieces. On June 15th, 1900, Dr. Abbe performed lumbar nephrotomy and removed the large calculus; but a careful search with the finger, metal instruments, and needles failed to detect the two outlying pieces which were shown in the radiograph. A bistoury was freely used inside the kidney to cut through all partitions of the numerous pockets.

Three weeks later, when the kidney had contracted digital and instrumental search —without either—revealed the remaining calculi protruding from separate pockets and by cutting around them they were easily dug out. Since the operation the patient had gained twenty pounds in weight. He still had a pus-discharging sinus, which would doubtless close in the near future. In connection with this case, Dr. Abbe exhibited the radiograph which had revealed the presence of the renal calculas.—*Indian Medical Reeord, Nov. 6, 1901.*

Report of Five Cases of Poisaning.

The regular meeting of the Baltimore Medical and Surgical Association was held at the hall of the Medical and Chirurgical Faculty, No. 847 N. Eutaw St., on Monday evening, November 11, 1901, Dr. Chas. G. Hill in the chair, and Dr. Eugene Lee Crutchfield, Secretary.

The Committee os Honor favorably reported on Dr. R. Persy Smith, and he was unanimously elected to membership.

Dr. E. L. Whitney read the paper of the evening, viz: "Report of five cases of poisoning."

Dr. Whitney said: These cases were of interest from the standpoint of the difficulties of the diagnosis. The entire family were discovered by neighbors when in a state of unconsciousness and physicians were hurriedly summoned, and on account of the contracted pupils, opium poisoning was suspected and Atropine was given. Ptomaine poisoning, and also gas were later suspected. The examination of the blood with spectroscope and chemical tests showed that they were cases of carbon-monoxide poisoning. The father of the family (after regaining consciousness) related facts which confirmed the diagnosis of carbon-monoxide. The man afterwards complained of numbness and anesthesia in different parts of the body. One of the children also complained likewise. The rapid disappearance of albumen and sugar from the urine of different ones in the family, eliminated these as causative agents in these cases. The cause of sugar in the urine in such cases is not definitely known. Different theories have been advanced. All of these five cases recovered promptly. There was taken a small asceptic hypodermic syringe from the brachial a small quantity of blood, which showed between the D and E lines a wider coloring proving a reduced amount of hæmaglobin. There was a constant variance in its character. Dr. Whitney showed the seal test in sterilized tube. The blood of course was arterial. In these cases the police did not notice gas-poisoning. Carbon-minoxide poisoning is a familiar form of suicide among the French. A dog also (under test) being well before, showed signs of such poison. Partial suffocation is presumed to be the cause in these cases by Hoppe-Seyler, while Minkowski declares it traceable to disturbances of the liver. The theory of muscular chemistry in the loss of ability to handle sugar and the excess of sugar in urine were briefly referred to by Dr. Whitney. The anæmia in these cases is due to deficient oxidation.

Dr. Chas. G. Hill, it is interesting to note that the man showed albumen in the urine while he also showed sugar. From observation he is led to believe that albuminuria is due to changes in the blood primarily, the kidney lesions being subsequent. Had these blood changes continued they would have been followed by structural changes in the renal organs. Typical cases of diabetes Dr. Hill believes are traceable to structural changes in the liver. These patients he treats with Thyroids and purified bile, and gives them fatty substances with a moderate restriction of starchy foods. In reference to Dr. Whitney's cases Dr. Hill said that such cases may cause serious criminal charges, but he did not believe in circumstantial evidence.

Dr. Hill recalled a case of Carbon-monoxide poisoning in the country, where children suffered from a Christmas tree taking fire. Dr. Hill also mentioned a case of Diabetic gangrene that was relieved by Thyroids. Also a case of transient glycosuria that after a short treatment proved acceptablc to a Life Insurance Company.

Dr. David Streett said, we see all phases of gas poisoning. All complain of headache, vertigo and dizziness. A soft pulse such as is described in yellow fever is observed. In the fatal cases we see the face flushed, stertorous breathing and rapid respiration. Chloral and anæmia are no doubt caused by gas poisoning. The oyster heat and the coal stovə are noticed often to cause these phenomena. The habit of inhaling gas was noticed by Dr. Streett in one of his cases, the patient being a young woman who was decidedly chlorotic.

Dr. C. Urban Smith said that in these cases the treatment was on general principles. In two cases he had treated, one with a cylinder of oxygen, the results were poor, and he used stimulants. The second was a worse case, and he used intravenous injections of salt solution. Results were good. He practiced blood-letting to the extent of at least 12 ounces. Blood pressure was markedly increased after the salt injections.

The patient revived in 20 minutes and the blood pressure increased in 5 minutes, and the patient was conscious in one hour. These results were better than in the other case where oxygen was employed.

Dr. J. I. Pennington said, about 20 years ago he saw a case of gas poisoning in a man who had been exposed 6 hours. Oxygen treatment was imployed, but to no avail. Dr. Pennington asked if any of the members had experience with the Kloman treatment with nitro-glycerine.

Dr. J. M. H. Rowland reported a case that he was called to, on N. Howard Street, which was as follows: On arriving found the room full of gas, the man unconscious. The man was suffering from narcosis and his respiratiou was 9 to the minute, then it went down to 5, and then to 4 a minute or even 3. Stimulants, Strychnine, Digitalis and Aqua Amonia were given, and when these failed the Hospital corps assisted in endeavoring to establish artificial respiration. Case recovered.Cold cloths, slapping on the face with ice cloths and the application of ice to the chest also were used with good results. In another case Dr. Rowland noticed unusual excitation; this was probably due to the Strychnia. Dr. Rowland quoted Dr. D. Streett as say ing that Oedema of the lungs frequently followed these cases, and sometimes pneumonia.

Dr. J. T. King said, no words are too laudatory in commending the care and work of Dr. Whitney in his cases. Care should follow the work of diagnosis. It is easy to diagnosticate a case where we go into a room and smell gas and find the patient unconscious. Dr. King had never seen a fatal case. He uses nitro-glycerine, strychnia aud artificial respiraiion. In four cases he reported all recoveries were due to employment of atmospheric air.

Dr David Streett said, It is remarkable how quickly some persons become narcotized by gas, and others how slowly. He related cases and said, it is yet to be solved, why this is?

Dr. Hill related case of a boy who had inhaled gasoline, and after enjoying it, taught a number of others the practice and soon a crowd were seen engaged in the habit.

Dr. Whitney (in closing) said, In these cases the blood is not able to carry oxygen; hence the futility of giving it. Amil-nitrite is probably contra-indicated, as it produces methæmoglobin. Transfusion would do some good. The temperature in these cases is somewhat elevated, 2 to 3 degrees.

Report of case by Dr. John I. Pennington. Was called two weeks ago to see a young lady who had taken about 2 tablets that a physician had given her for vaginal injection. From the burning he suspected Bichloride of Mercury poisoning, there also being vomiting present, He used egg-albumen and washed out the stomach. The case went on to an uneventful recovery. The meeting then adjourned.

Hysterical Fever.

H. Dippe (Deue. Arch. f. klin. Med.) reports the case of a woman, aged 43, who as a girl had had hysterical attacks at the menstrual periods. The attacks likewise occurred after her marriage, with varying frequency. In November 1896 she by accident received a blow in the hypogastric region, and afterwards suffered from fever with morning remissions. There was great tenderness in the right lower part of the abdomen, and the medical men who saw the case agreed that there was some suppurative process going on. Physical examination, however, gave no definite signs, and the patient's nervous condition was peculiar. From the beginning of January 1897 hysterical attacks—crying, groaning, sighing, convulsions, unconsciousness—complicated the matter. In the latter half of January there was decided improvement; the fever ceased, the abdominal pain became less, and the hysterical symptoms subsided. The patient, however, had become much weaker, and when all the bad symptoms recommenced at the beginning of Feburary, an operation was decided on. The temperature was especially high after her removal to a surgical ward, and on the preceding the opeation it reached 42 deg. C (107.6 deg. F.). Professor Dœderlin opened the abdomen one Fbruary 10th, 1897 and to everyone's astonishment found all the organs normal. However, the vermiform appendix—which contained some fœcal fragments—and both ovaries were removed. The result of the operation was wonderful. Fever, pains, and hysterical attacks ceased. The patient, who was told that the pus had been removed, recovered rapidly, had a good appetite, and was able to leave the hospital in three weeks. Since this time the patient has remained well. The oóphorectomy has caused relatively very little trouble—partly, perhaps, because, in consequence of a chronic uterine dis order, she looses a little blood which is enough to satisfy her. Since the operation there have only been slight manifestations of hysteria. Dippe considers the fever as the most interesting phenomenon in the case. No deception was possible, These rises of temperature were evidently not a consequence of con-

vulsive attacks' for they occurred quite independently. According to Boulay's article on hysterical fever, the case would fall under the heading "hysterical pseudo-peritonitis." A case published by Mary Putnam-Jacobi is very similar to Dippe's. In many respects, also, Sarbo's case is analogous. Both Boulay and Sarbo think that the existance of hysterical fever can be no longer doubted, for the suggestion of fever (Debove) has been repeatedly successful in raising the temperature, and the power of the nervous system to influence the temperature has been proved by experiments.—*Indian Medical Record*, Nov. 13, 1901.

Internal Disinfection,

Dealing with pulmonary tuberculosis and typhoid fever L. Weill (Therap. Monats., November, 1901) considers that disinfection applied internally should be very useful. He chose corrosive sublimate as the best chemical means, since it has an inhibitory action on bacteria, even in the dilution of 1 in 500,000. He says that he realizes that since so many vaunted specifics have been brought out, the medical public are very sceptical about new remedies, and therefore he does not intend at present to report the numerous cases of ordinary apical phthisis, which he has quickly cured by his method. The cases he writes, of are acute tuberculosis and tuberculous glands of the neck. (One case of apical phthisis, however, he does report, in which all signs and symptoms disappeared after two months of treatment). He applied the perchloride in the form of a vapour for inhalation. Two inhalations were made daily, and in each case subjective improvement and a fall of temperature followed the procedure. The tuberculous glands, also, reacted in an astonishing manner to the treatment; the glands being reduced in size rapidly. He warns one, however, that the glands must not be too hard (that is, contain too much fibrous tissue), or too soft (that is, there must be no caseation). For typhoid fever he applies a 1 in 10,000 or 1 in 20,000 solution in the form of an enema, directing that about 17½ ounces (½ litre) shall be retained as long as possible. Here, again, he noted a fall of temperature, and states that comparing the case so treateded with those treated in the ordinary way, he believes that the course is shorter, and the type less severe, when treated by injections of sublimate.—*British Medical Journal*, Nov. 23, 1901.

Malignant Dermoid of Ovary.

Backhaus (Arch. f. Gynak, vol. lxiii, Nos. 1 and 2, 1901) repors a case of unusual malignancy. The patient was a girl of 17, and the tumour had caused but acute pain had set in suddenly when torsion of the pedicle was diagnosed. Ovariotomy was performed, and a solid tumour was removed; it contained very few cysts. This tumour was a dermoid of the type known as steatoma. The solid substance consisted of well-formed tissues mixed in inextricable confusion, not after the manner of dermoid growths within cysts where large patches of bone or thick tufts of hair are frequent. Skin, hair, cerebral material, bone, and plain muscles fibres were found collected together- It was noted that in the cystic portion there was a distinct tooth, as is so common in dermoid cysts. As the tumour was clearly a malginant growth, the uterus and the opposite appendages were removed through the vagina on the twenty-fifth day after the ovariotomy. A month later signs of intestinal obstruction set in, and an operation was necessary. Six days later a fourth operation was needed. At the end of the third month after the first operation the patient had had headaches with vomiting. Agitation and convulsions set in, and subsided a little, to recur in greater force. Indurated masses could be felt in the upper part of the abdomen and in both supraclavicular regions. Death occurred in a few days but no necropsy was allowed.—*British Medical Journal*, Oct. 12, 1901.

Treatment of Tuberculosis.

At a meeting on November 8th, of the Birkenhead Medical Society, Dr. Nathan Raw, read a paper entitled the Diagnosis and Treatment of tuberculosis, with special reference to the open air method. After referring to the ravages caused by consumption in civilised communities and to the great advantage in our knowledge of the disease, brought about by the discovery by Koch of the tubercle bacillus, the author discussed the question of hereditary transmission of the disease. He held that there was little or no evidence to prove that such transmission did occur: but this question was of little importance as compared with infection after birth. In his opinion, there is very little specific tendency in children of tuberculous parents to become infected, except in so far that such children were not so strong as those of healthy parents, and therefore more susceptible to disease of any kind. The commonest means whereby parents become infected, was by the inhalation of tubercle bacilli. He then described the various modes of invasion of the disease; and in referring to the pleuritic forms, stated that he was not by any means convinced that all cases of pleurisy were tuber-

culous, as was sometimes stated. Dr. Raw next discussed the diagnosis of tuberculosis and treatment. The latter he divided into two heads. (1) Preventive, and (2) Specific. Under preventive treatment, he urged that phthisical patents must be taught not to spit on the ground or floors of rooms, but must carry spittoons, or some receptacle, in which the sputum could be collected and then destroyed, either by treatment with disinfectants, or by burning. The clothing and utensils used by such patients should be disinfected; and rooms which had been used by them should be disinfected, painted, and papered before use by other individuals. An insufficient air supply to the apices of the lungs was very important agent in including phthisis; and all children ought to be taught to breathe properly, so as to expand their lungs thoroughly. In the open-air treatment the main object was to make the patient live out-of-doors as much as possible, and also to improve his nutrition. If the patient could be fattened, the disease might be left to take care of itself. At Nordrach datients were often in the open air for ten hours every day, and this in spite of fog and cold. Excessive cold was not harmful, even in advanced cases, as the results of treatment at Davos showed. The question of rest or exercise for such patients was a very vexed one, some authorities insisting upon absolute rest in the open air, others recommending gradually-extended exercises. Complete rest with regular breathtng exercises gave in many cases excellent results. A febrile condition, with a temperature of 100 deg., F. or over, was an absolute bar to exercise. A three to six months course of sanatorium treatment would generally arrest the disease. Pure air, an equable temperature, and a maximum of sunshine, were the desired conditions; given these, cases would do as well as in England as aboard. Specific medication had proved useless. Drugs could only be of use by helping to render the tissues more resistant. Dr. Raw mentioned some of the drugs and their combinations, which had in his hands proved themselves of service in the treatment of symptoms, including creosote or guaiacol as routine treatment. He laid great stress on the importance of attending to the feeding up of the patient; but he was not in favour of forced feeding, as practised on the Continent. In conclusion, Dr. Raw said that an organised effort on the part of the medical profession, health authorities, and the public must be made in figeting this dissase. Healthy houses must be provided, and sanitary areas must be swept away. He urged voluntary notification of the disease and voluntary removal of patients, mbnicipal sanaroria for curable cases, and isolation hospitals for incurable ones.—*British Medical Journal*, Nov., 23 1901.

Delivery of the After-coming Head.

W. Nagel (Berl. klin. Woch., July 22d, 1901) describes a case of a labor in a subject whose pelvis was contracted to a high degree; and he uses the history of this case to exemplify the practical value of a method of delivery which he believes was first described by Van Hoorn (1715). The patient was a primipara, aged 32 years. On April 13th, 1900, labour pains began, and after an hour the "water" broke. She was a small woman, measuring only 4 ft. 7 inches, in height, and showed ample signs of past rickets, The pelvic measurements were; dist. spin. ilii, 10⅛ ins.; dist. crest. ilii, 10½ ins.; conjug. ext., 5¾ ins.; conjug. diag., 3 ins. From these figures he estimated that the conjugata vera could not exceed 2½ ins. The fœtus presented by the first vertex, and a large coil of the cord together with the left arm were prolapsed through the partly dilated cervix. The cord did not pulsate. The pains were strong, but the head had not entered the pelvis. He chose to attempt the delivery *per vaginam* rather than by Cæsarean section, since the fœtus was dead, and, with the conviction that it would be the least difficult procedure, he turned the fœtus and perforated the after-coming head. The version was performed with ease, and the left foot brought down. As the buttocks of the fœtus passed the inlet of the pelvis, and whole child rotated on its long axis, and the presenting leg was seen to lie to the front of the mother. The fœtus was extracted as far as the shoulder in tois position. The arms were brought down with much difficulty, and then it was found that the head was stopped above the inlet of the pelvis, with the chin resting on the symphysis to the right, and the occiput directed to the left. Seizing both legs, he brought the abdomen of the fœtus forwards on to the abdomen of the mother. The occiput immediately entered the pelvis, and the left hand was now passed into the vagina, behind the buttocks of the fœtus. The occiput was then perforated. The cranioclast was applied without much difficulty, and, aided by the continued anterior flexion of the whole of the fœtus, the head followed. The whole operation occupied an hour and a half. The fœtus (without making any allowance for loss of blood and brain) weighed nearly 5½ lbs., and measured 19½ ins. There was a ruptured perineum, which was immediately attended to, but otherwise the patient borne the pro-

cedure well. She was able to get up on the fourteenth day. Nagel strongly recommends the method of bringing the fœtus forward on to the abdomen of the mother in all cases of the after-coming head, when the face at the time of entry into the pelvis is looking forwards. By this means the birth can be rendered materially easier when perforation is not as well as when it is required.—*British Medical Journal*, Oct., 12, 1901.

Diabetes and Phthisis.

The prognosis of phthisis coexisting with diabetes is accepted as hopelessly bad, but G. Oeder (Deut. med. Woch., October 3rd, 1801) reports a case in which the expected did not occur. In 1896 (April) he was consulted by a man, aged 51, who had been suffering since November, 1895, when he had an attack of influenza. His history showed that in 1888 he had an attack of perityphlitis, which had given him trouble from time to time, and which, in spite of three operations, had left a discharging sinus. His physical signs pointed to a tuberculous pneumonia of the left lower lobe, and also of the apex of the left upper lobe in a progressive stage (fever, and numerous tubercle bacilli and sputum). On examinating the urine he found that it contained 75 per cent. of sugar. Oeder therefore told the wife of the patient that the prognosis was very bad, but postponed giving an absolutely hopeless prophecy for a short time. Eleven days latter the patient was seized with profuse hæmoptysis. He recovered slowly from this, and on May 1st had a second attack, and a third one on May 29th. Shortly after this the pyrexia disappeared and the "catarrhal" lung changes diminished. In December the abdominal sinus healed, the patient was in good condition, but still showed 4½ per cent. sugar. The condition continued fairly satisfactory, in spite of the diet not being strictly adhered to, until February, 1901. He then had a cold, and on physical examination Oeder found impaired resonances on percussion both behind and in front over the left side of the chest, and weakened vesicular breathing There were plentiful tubercle bacilli in the sputum. The urine showed 33 per cent. glucose; no albumen. There was no polyuria, no retinitis or cataract. In Oeder's opinion, the phthisis was in a stage of arrest.—*British Medical Journal*, Nov., 23, 1901.

Pylorectomy: Nineteen Years After, History.

Rydygier (Przeglad Lekarski, Nov. 29, 1900) reports the after-history of his oldest case of pylorectomy. He operated, 19 years before that report was published, on a woman then aged 30 for a gastric ulcer in the pylorous which had penetrated into the pancreas, the affected portion of which organ was at the same time excited. Since then the patient has had five children the eldest 17 years old. Her digestion is good, and she works hard. Rydygier prefers pylorectomy to gastro-enterostomy in cases of perforating ulcer of the pylorus without much adhesions and in fairly healthy women. It avoids the danger of future hæmorrhages or malignant degeneration of the ulcer; again, in gastro-enterostomy a "vicious circle" is established, and in one case of Rydygier proved fatal. In the above case of pylorectomy a conical piece of the posterior wall of the pylorus was excised, so that the duodenum and stomach could be united directly by suture without any folding.—*British Medical Journal*

Prevention of Auto-extubation.

E. Schlechtendahl (Munch. med. Woch. April 30, 1901) considers that there is a great danger of the patient himself or herself dislodging the intubation tube in diphtheria if one leaves the thread attached to the tube, while if one does without the thread one loses the advantage of being able to withdraw it quickly in case of need. The thread, further, he says, may be bitten through and thus rendered useless. He suggests that, after the tube is placed *in situ*, a Bellocq's sound be passed and the thread be withdrawn through the nose, and attached by means of a piece of strapping or collodion to the nostril or upper lip. He recites the advantages which he sees in this method.—*British Medical Journal*

Abdominal Inflation for Intestinal Hæmorrhage.

Hæmorrhage in the abdominal cavity, unlike that in the thorax or cranium, is dangerous on account of the quantity of blood which is poured out of the vessels. This condition has led G. Kelling (Munch. med. Woch., Nos. 38 and 39) to experiment on animals and on the human cadaver in order to produce a "tamponage" of the peritoneal cavity, which would be sufficient to arrest hæmorrhage. Abdominal hæmorrhage is most frequently intestinal hæmorrhage, but wounds of the liver and spleen also at times provide dangerous hæmorrhage. He states that on an average the total quantity of blood in the human body measures about 5 litres (8¾ pints), and that the removal of half of this quan-

tity, that is 2½ litres or 4⅝ pints, may lead to death. The abdominal cavity—indeed the stomach and the colon—can contain this amount. If this occurs, the intra-abdominal pressure is not increased, but the abdominal walls merely become pushed forward. To arrest abdominal hæmorrhage, the usual methods too frequently prove useless, Compression and ligature of the bleeding vessels are the only reliable methods of controlling it. Ligature is not often possible. Direct tamponage through the stomach is not free from danger and not easy to perform. Tamponage after laparotomy with gauze has many obvious objections. Kelling therefore comes to the idea of blowing up the abdomen with air. He first determined the blood pressure in the bleeding vessels, that is in the abdominal vessels. In six dogs he found that the pressure in the femorals was 100 to 120 mm. of Hg., in the gastrolienalis 50 to 60 mm., in the cornary arteries 30 to 50, and in the gastric mucosa 15 to 25 mm. In man, he was able to measure the blood pressure in the inferior coronary artery, during operations in 3 cases, and found it between 38 and 53. He therefore deduced that most bleeding will be arrested if the intra-abdominal pressure be raised to about 50 mm., of mercury. In a series of experiments he found that dogs bore a blowing up of the abdomen to this degree very well. The blood pressure was scarcely affected by the increase of intra-abdominal pressure; this, he explains, is due to the fascia covering the large veseels not giving way as do the muscular elements, so that the increased local pressure does not easily reach them. He further performed an ingenious experiment to determine the effect of the pressure on the organs. After inflating the abdomen he introduced a small cystoscope encased in an outer metal tube with a pointed end. No air escaped through this arragement. Under a pressure of from 50 to 60 mm. Hg. the diaphragm was not used in respiration and was tightly stretched, liver and spleen were compressed, and appeared dark-reddish brown in colour, the stomach and intestines were flattened against the posterior wall and were pale, the larger intestinal arteries appearing like fine threads. He produced some wounds of various organs with the point of the cystoscope, and observed that little or no bleeding occurred. In order to compare exactly the bleeding from wounds with and without air tamponage, he introduced a double-edge knife, provided with a thread, so placed that on drawing on the thread the knife would divided the liver, spleen mesentery, or other part. The thread was pulled on as soon as the abdominal wound was closed, with the exception of two sutures, which, however, were immediately tide after the knife was removed and the trocar with air-pumping apparatus was applied. The effect of inflatation was very marked, hæmorrhage almost at once being stilled from small and medium-sized vessels, and much diminished from large one. In order to avoid injuries to the abdominal wounds in introducing the trocar, he performed a series of experiments on dogs and human corpses. These taught him the needle must obliquely pointed, and that the flat surface must be introduced parrallel to the abdominal wall. As soon as the skin and sub-cutaneous tissue are pierced (under infiltration anæsthesia if necessary) he commences blowing in air, so that after traversing the fascia, the liver and other organs are forced away from the sharp point by the force of the incoming air. The apparatus consists of a double scent squirt arrangement with a tube leading to a cross tube which connects the trocar or needle with a tonometer. The needle should be provided with a sheath to protect the points when introduced, and this should be left *in situ* until the residue of air is to be let out again, so as to avoid a double puneture. The cross tube is provided with a cotton wool filter to clean the air menhanically.—*British Medical Journal*, Nov. 23, 1901.

Comparative Medicine.

We have long held the opinion that there is a great future before the comparative study of the diseases of animals and man. At present the veterinary department is kept too much apart from the study of human disease. It is true that the class of men who enter for the two professions are widely different, and as a rule the intellectual development of the average veterinary surgeon is not as high as that of the average doctor. The veterinary surgeon is not usually endowed with a scientific trend of thought; there are, of course, exceptions, but they are few and far between. The majority do not take that interest in their profession that one might expect, a fact that is probably largely due to the debasing influence of the persons with whom they are brought daily into contact, for it is well known that the respectability of the people who have much to do with horses is in inverse proportion to the nobility of the animal with which they have to deal. We believe, however, that there is a better future for the veterinary profession, a future which will largely owe its improvement to the comparative study of the diseases of man and animals. This is a study which has been too long neglected, but is becom-

ing an absolute necessity in the face of modern sanitary science.—*Meaical Press and Circular*, Nov. 13, 1901.

Ages at Which Different Diseases Kill

The Insurance Press, October 16. 1901, gives very interesting details with reference to this subject. From them it would appear that the chances are six to four that consumptives will die before the age of forty-five; fifty-six chances to forty-four that sufferers from "heart disease" will reach sixty, etc.

No records of "the natural shocks that flesh is heir to" are kept more scientifically than the data which the life insurance companies accumulate from their own experience. The cause of every death among policyholders is investigated with the utmost care by the medical directors of the company interested. Thousands of physicians, selected for their skill, are attached to the medical departments of the great American life insurance offices. In every community of consequence the companies have physicians on guard to examine into the physical condition of applicants for insurance and to investigate causes of death when called upon to do so.

The Mutual Life Insurance Company of New York, the oldest and largest of the American companies—in fact, the largest life insurance company in the world, has prepared some interesting statistics showing the cause of the deaths among its policyholders from the commencement of its business, in 1843, to the end of the year 1898, a period of fifty-six years. The first year only three policyholders died; in 1898 the deaths numbered 3,421. In the 56 years, 45,525 deaths passed under review, from a total of more than 1,000,000 individuals on whom insurance had been written.

As might be expected, the mortality experience of the Mutual Life is a vast storehouse of scientific as well as curious facts. The scientific things may be left for the scientists to study. Popular interest will center in the things that everybody can understand.

For example, at what age do certain diseases carry off their victims? That is something that the good citizens who has "symptoms" would like to know.

The mutual Life's figures can tell nothing of individual cases, of course, but of average or typical cases they tell everything, and here are some of the revelations interpted by the Insurance Press:

Ages of Which Different Diseases Stop the Human Machinery.

If a person is to die of consumption, the Mutual Life's records show the chances are about 6 to 4 that he will die under the age of forty-five. Deaths from consumption are divided as follows, by ages: Under forty-five, 59 per cent; forty-five to sixty, 29 per cent; above sixty, 12 per cent.

If a person is to die of other general diseases, small-pox, measles, diphtheria, erysipelas, cancer, diabetes, etc. (which cause in the aggregate nearly one-eighth of all deaths), the chances that he will die under age of forty-five, between forty-five and sixty, or above sixty, do not differ widely. Thirty per cent. of the deaths from these diseases occur under age forty-five, 36 per cent. between forty-five and sixty, and 34 per cent. above sixty.

If a person is to die of apoplexy, softening of the brain, paralysis, ect., the chances are 55 to 45 that he will live to be sixty or more. Only 12 per cent. of the deaths from these diseases occur under forty-five years; 33 per cent. occur between ages forty-five and sixty; 55 per cent. occur above age sixty.

If a person is to die from some other nervous disease besides apoplexy, paralys, etc., he will probably pass away before he is sixty. Thirty-five per cent. of the deaths from these causes take place under age forty-five; 38 per cent. betwwen ages forty-five and sixty; 27 per cent. above age sixty.

If a person is to die of heart disease the chances are 56 to 44 that his heart will perform its allotted task until he is sixty. Thus according to the Mutual Life Insurance Company, he may expect to live to become gray-headed or bald-headed. Not more than 11 per cent. of the deaths from heart disease occur under age of forty-five; 33 per cent. between forty-five and sixty; 56 per cent. above sixty.

If a person is to die of pneumonia the chances are 64 to 36 that he will not reach sixty. Twenty-nine per cent. of the deaths from pneumonia occur under forty-five; 35 per cent. between forty-five and sixty, and 36 per cent. above sixty. Other respiratory diseases, such as bronchitis, pleurisy, etc., grant a little longer lease of life. Eor such causes the deaths under forty-five are 24 per cent.; between forty-five and sixty, 30 per cent.; above sixty, 46 per cent.

If a person is to die of some derangement of the digestive system the chances are more than 2 to 1 that he will not live to be sixty. Thirty per cent. of the deaths from diseases of this class occur under age forty-five; 38 per cent. between ages forty-five and sixty, and 32 per cent. above age sixty.

If a person is to die of Bright's disease he has a fair chance of reaching sixty. Only

16 in 100 of the victims of Bright's disease die under forty-five; 37 in 100 die between forty-five and sixty; the remaining 47 per cent die after completing three score years. Other complaints, classified as genito-urinary, are old-age diseases. 77 per cent. of the deaths from such causes occurring at ages above sixty.

If a person is to die from accidental or violent causes the chances are 86 to 14 that he will not see sixty. Fifty per cent. of the deaths from violent causes occur under forty-five.

If a person is to die from some obscure, illdefined or unclassified disease he has 62 chances in 100 of reaching sixty. Human bodies that have been subjected to the wear and tear of three score years or more are most subject to the kind of break-downs that puzzle the doctors.

If a person is to die of typhoid fever his summons will probably come before he reaches forty-five. Fully 68 per cent. of the typhoid fever deaths occur under forty-five; onother 23 per cent. between ages forty-five and sixty, the remaining 9 per cent. at higher ages.

Percentages of Deaths, by Ages, from Familiar Diseases as Shown by Fifty-Six Years' Experience of the Mutual Life Insurance Company of New York.

	Per cent. Under 45.	Per cent. 45 to 60.	Per cent. Above 60.
Consumpsion,	59	29	11
Other genral diseases	30	36	34
Apoplexy, paralysis, softening of brain etc.	12	33	55
Other Nervous diseases	35	28	26
Heart disease,	11	32	56
Pneumonia,	29	35	36
Other respiratory diseases,	24	30	46
Digestive diseases,	30	38	32
Bright's disease,	16	37	47
Other genito-urinary diseases,	...	...	77
Unclassifiec and ill-defined,	14	23½	62½
Typeoid fevе,	68	23	9

The data given above related to all lives, without regard to sex. The essential difference between the sexes in the mortality tables result from the accidents and diseases due to the function of maternity.

Among causes of mortality common to both sexes the widest differences are found in the number of deaths from cancer and from violent causes. The latter causes are more fatal among males than females. On the other hand, the cancer death-rate among females is much greater than among males. —*The Virginia Medical Semi-Monthly.*

The Education of Children.

Judging from an editorial which follows taken from the Medical Record one would be led to believe that the facilitis for the proper education of the children in the metropolis are inadequate.

"Education of the young and the means to be employed successfully to attain this end have been for years past a fruitful theme for discussion among philanthropists. There are those who declare that the value of education—as it is known in these days—has been much overestimated, and provided that a youth possesses sufficient knowledge to make his way in the world, and enjoys good health, his equipment for the battle of life is satisfactory.

This view of the case is no doubt true so far as it goes, and it is undeniable that overexerting the immature brain at the expense of the body is radically wrong; but on the other hand, in almost all paths of life, the well-educated individual, given other conditions equal, has the advantage over the one whose mental powers have not been so efficiently trained. Education conducted upon rational lines—that is, paying due attention to the needs of the body while bringing out judiciously the intellectual capacities—is a boon of great value. It would seem, however, judging from the reports published in many of the New York lay journals, that the care of the young from an educational point of view is being greatly neglected in this city. The statement has recently been made that a very considerable number of children in the boroughs of Manhattan and The Bronx are unabse to avail themselves of the advantages of education, owing to the fact that the school accommodation in inadequate.

This defect should be remedied as soon as possible, for it is a grave blot upon the fair fame of perhaps the richest city in the world, and the metropolis of certainly the wealthiest and most advanced country in that she should not afford facilities *for education* in keeping with her acknowledged elevated position."

How a Dose of Cocaine Acts.

A correspondent writes: Eighteen hours after I took my first and only dose of cocaine I began to shout stray verses from Tennyson and Keats. I completely forgot my surroundings and recited in boisterous tones "Break, break, break," and "Crossing the Bar" as if they were wedding lays. It did not concern me that the whole house was disturbed, and many of its inmates cursed me. My voice improved at every line. I grew more and more delighted with it, when a slight pain near the region of my heart brought me back to myself. I heard my heart beat. The pain increased. I trided to stifle it but every vein throbbed and a queer sensation stole over me. With wide open eyes I looked around in terror to catch some hidden imp who might be play-

ing mischievous tricks. Every moment I got more nervous, and yet I tried to battle with my fear. Terrible cramps seized me in every limb, Respiration became difficult and my breath came in measured gasps. As yet no thoughts of destruction entered my brain. I was too much engrossed with my bodily sufferings. There came cramps in my hand, then near my heart, again in the ear a cruel sensation which circulated like a fiery serpent all over my frame. Respiration became more difficult. I feared suffocation every moment, and with a mighty effort I rose, put on an overcoat, and dashed into the street. Drops of rain were falling and cooled my aching head. I guided myself to the pier. It was nearing eleven. Calm was on the waters, but within my breast a wild storm. Mechanicaly I took myself to a seat, and there thought all my pain of body had left me. But it was a delusion. An irresistible temptaion to dive into the water conquered me. I forgot I could not swim; I only thought of the relief to my pain. A few steps and I got close to the low parapet, and I was about to spring, when I was seized bodily by a drunken sailor whose keen eyes had watched my every movement, and whose English spirit overcame the affects of his deep carousing. When I came to myself, it was early morning. One by one the incidents of the past night returned to me, and with them the memory of all the miseries my poor frame had endured. Depression soon set in, and in vain I sought to escape the horrors of that night. Memory with its thousand voices goaded me to desperation. It reminded me of my one guilty act, by which I brought on myself all the horrors which a solitary dose of cocaine can inflict. The joy and cheerfulness of the previous day were fled. Faded were the day-dreams which had promised unalloyed happiness. What remained was the bitter memory of what I had been. Let the Bengall youths indulge in that drug as they like. I want no more if it.—*Indian Medical Record*, Nov. 6, 1901.

Post-Anæsthetic Paralysis.

As the result of a study of the paralytic states that develop in the sequence of some surgical operations performed under general anæsthesia, Mally (Revue de Chirurgie) concludes that two groups of cases presenting hysterical and reflex palsies. Central palius due to cerebral hæmorrhage are rare in which the anæsthesia appears to have induced rupture of a vessel through purely mechanical influences. Peripheral palsy is, however, a common complication. It always results from compression, and the influence of the anæsthetic is only indirect, permitting involuntary and accidental compression of nerve-trunks or plexuses. The anæsthetic may, besides, exercise some tonic or depressing influence upon the nervous system, but this is purely hypothetical. The preventive treatment consists in the avoidance of strain, pressure, or constriction. Peripheral palsy is due to compression should be treated with localised faradisation as early as possible, unless degenerative atrophy be present. Impaird mobility at the shoulder may be averted by early passive motion. Profound reflex palsy should not be treated with local electrization, but with sedative applications of the static current to the nape of the neck, and, in accordence with indications, with revulsion of the vertebral column by means of the actual cautery.—*Indian Medical Record*, Nov. 13, 1901.

ADVERTISEMENTS.

The Morphine Habit and Its Cure.

By Paul Cook, M. D., St. Louis, Mo.

It is not my intention to enter into a discussion of the pathological condition resulting from the continued use of morphine. That the drug ties up the secretion and impairs the functions of the glandular system is well known.

It is also a well known fact that a ready tolerance for opium in any form is easily acquired, and a fixed habit established that compels its victims to continue its use in ever increasing doses, to the end that they eventually become phisical, mental and moral wrecks. This habit seems to be continually on the increase, finding its victims in every rank of society, often claiming for its victims some of the brightest members of the medical profession.

It was a source of great surprise to me, when I first realized to what extent this habit existed, that the medical profession seemed content to accept without question the oft repeated assertion that there was no cure for the habit. Or, worse than all, saying that a person addicted to this habit could quit if he so desired.

The treatment of chronic morphinine has been left almost entirely in the hands of the charlatan and quack, until the last few years. It was to this, and to the fact that an associate of mine fell a victim to the habit, that first interested me in rn endeavor to try if possible to discover a cure

for the habit. By experimenting I found that no such thing as a specific existed.

I tried many secret cures and specifics, and found that the principal virture was to enrich their owners. Then I took up what appeared to me as a rational treatment.

I wish to state at the outset that every remedy I use in my treatment has been used in part or entirely by others, but so far as I know no one has arranged their treatment as I have.

I will further state that I have treated some twenty cases for the morphine habit, and so far as I know only one of my patients have retnrned to the use of the drug. And further, it matters not how low a person may be, they gladly welcome emancipation from its fetters.

Melachol in Its Treatment.

While I have treated many cases of morphine habit without the use of Melachol, I now regard Melachol as indispensable in its successful treatment. Melachol is a physiological antagonist to the condition set up by the long-continued use of opium in any form.

I find that by stimulating the glandular system to normal action that the tolerance of the patient for morphine is lessend, and that their mental and physical condition is considerably bettered. While Melachol will bring abaut this happy condition, morphine cannot be entirely withdrawn without some supporting treatment.

I took one patient down from twenty grains, hypodermically, to one-half grain with Melachol alone, and in about thirty days, but I could not take him from the last half grain until I augmented the treatment. His condition during the reduction, however, was good, and at no time did he request a larger dose of moarphine than that given. In the treatment of this class of patients most careful attention should be given to body cleanliness; daily sponge baths should be given with occasional alcohol rubbings. A light, nutritious diet should be given, and as cheerful surroundings maintained as possible.

I submit a case that I don't think would have been possible to cure without the use of Melachol. This case was treated by me about two years ago.

Mrs C. A., aged forty-nine, weight, eighty-six pounds. Ten years previously was given opium for chronic dysentary. In a short time she started the use of hypodermics. She became emanciated and jaundiced. Within a few months, to use her family expression, and some time prior to the time I first saw her, she was compelled to have a nurse attend her at all time. She had the most marked case of jaundice I ever saw, and I should judge that her liver was more than twice its normal size; her urine was scant, high-colored, containing both bile and albumen. She had almost daily tonic spasms; these spasms would last sometimes as long as forty minutes, she being so rigid that it was impossible to flex her limbs at all. She ceased menstruating shortly after acquiring the habit. It is needless to say that in her condition her medical attendant was frequently changed, as none could benefit her condition. When I first saw the case I did not believe that even any material relief could be given.

I suggssted, however, that if she could be freed from the morphine habit that she might get a measure of relief. I was requested to take the patient in charge and do what I could for her. Good nurses were employed, as she would not leave home; general hygienic rules were enforced. I gave her liquor potassii arsenitis, four minims; tincture gentian, one drachm, after meals; strychnia nit., one-thirtieth grain, three times daily. I put her on Melachol, one ounce before breakfast, in tumbler of hot water, and one-drachm doses before meals, ordering her meals regularly, as she had not made any distinction between night and day in her mode of living for some time. I gave her the chloride of gold and sodium, one-eighth grain in avena sativa one drachm, every three hours. As she was one mass of abcesses, I took away hypdermic and gave her the morphine per mouth, which caused much complaint.

She claimed that she was using fifty grains of morphine in twenty-four hours. I gave her thirty grain by mouth the firts day, and was compelled to give her five grains more at night. I gave her sodii bromide, fifteen grains; second day fifteen grains morphine; third day five grains; fourth day two grains; fifth day one-half grain, and one-fourth grain at night, giving twenty grains solid bromide; on the sixth day I gave her two full doses of sulphonal, and gave in twenty-four hours fifty grains of bromide of sodii. A little whiskey was also given at this time. On the tenth day she complained considerably of pain in the bowels, for which, other remedies failing, I gave papine, which was continued at intervals for several days. One day she was given one-half ounce in twelve hours, which was the last given. Her general treatment was gradually reduced, the chloride of gold and sodium being given three times daily the Melachol before meals, and ten to twenty grains of sodii bromide at nigh to control restlessness.

About the fifteenth day the arsenic was withdrawn and she was put on the iodide of iron and the iodide of potassium in Trommer's extract of malt after meals. At no time after the first day did she express a need for morphine; nervousness in what she complained of most; this was easily controlled by the sodii bomide, which can be give in doses of one to two drachms. All patients get weak the first few days, and this patient was extremely weak, but slept well, took plenty of food, and when quiet said she felt good, even the day following the last of the morphine.

After the first few days she began to gain flesh and strength rapidly. At the end of thirty days she was much heavier, she had no jaundice, her skin and conjunctiva being clear. I ordered her to continue iron iodide and maltine and Melachol before meals.

I was compelled to go on a trip at this time. Two months after this she came to consult me saying that her menses had returned. She seemed healthy, her weight, she stated, was one huudred and thirty-five pounds; her liver was still considerably enlarged but seemed to cause her no inconveience. I have seen the lady within a few months, and more than a year after treatment, and she was still healthy. If this general line of treatment is followed out, allowances for the difference in temperament every physician could successfully handle this class of patients. That the treatment can be improved upon I feel quite certain, but as a basis to work from I don't think a better one has been published. I have had several patients who had been through institutions much advertised for the cure of this class of patients, but who failed in getting a cure come to my office daily, unattended, and get well. With the hope that this will do good I submit it for consideration.

The Perfect Throat.

It has been well said that there is no such thing as a perfect throat.

The imperfection has to do with both the respiratory and alimentary tracts. We breathe things as well as air, and it is the faculty of the intrusion to predicate and originate the most formidable diseases of the two systems.

To remedy this imperfection is a matter that is of the utmost moment, as all oesophageal and bronchial disorders are precursory to grave maladies. Maturally, of course, they have different dependencies, but to counteract the main cause, i. e., nasal pharyngeal and laryngeal inflammations, the profession has done itself much credit in using Sander's Encalyptol. This is a remedy which excels in clearing the vocal cords, strengthening the voice, invigorating the nerves, and thus acting prophylactic of those pulmonary and gastric troubles that embarass the practitioners. The catarrhal, irritant, and inflammatory developments disappear, and "hard colds," "nervousness," "dyspepsia," and the allied disorders that point out the conditions of throat debility, are simultaneously improved. There is no oppostng testimony. The evidence in favor of the remedy is remarkably refreshing. It should be used with equal parts of spirit of chloroform; 20 drops to a pint of hot water for an inhalation; or as a spray; ½ drachm of Sander's Encalyptol to the ounce of liquid petrolatum.

Gift of $25.000 Towards Penn's Medical Building.

Provost Harrison has just received from the Keasby and Mattisson Co., through its president and general manager, Dr. Richard V. Mattison, a subscription of twenty-five thousand dollars, with a note stating that they do so as an evidence of their great and abiding interest in the advancement of the medical profession of our country, no less than to show their keen appreciation, as Pennsylvanians, of the increasing needs of their time-honored and beloved University. The money is to go towards the erection and equipment of the new Medical Laboratory Building, which is about to be constructed on the plot of ground formerly occupied by the Veterinary Department.

Dr. Mattison graduated from the Medical Department of the University in 1879, standing high in his class, and was awarded "Honorable Mention" for the excellence of his graduation thesis. At the University he was one of the most diligent and earnest students, and was one of those who might always be found in the laboratories promptly at the beginning of the hours for laboratory instruction. The strenuous and serious interest which he too in his medical students, led those who knew him to believe that he had before him a splendid career as a practitioner of medicine. He transferred his energies, however, to commercial life in lines related to the medical profession, and has met with unbounded success.

Foriegn Dental Student in American.

The number of Dental Students in America from foreign countries is increasing every year. In the Dental Department of the University of Pennsylvania alone this year 80 of the 374 registered students are foreigners, which is almost 22 per cent.

and which represents olmost every country on the globe.

Another strange fact that only 8 per cent. of Penn's dental students come from Philadelphia, while 70 per cent. come from all over the Union from places other than the Quaker City.

On Analgesic Methods and Their Respective Limitations.

Prof. J.V. Miknlicz. of Breslau, says:

"Apart from the minor procedures, numerically important though they be in medical practice, the only local analgesic that we need consider nowadays is cocain and its surrogates, eucain, tropacocain and holocain.

"I refer the reader to the communications made by Gottstein in the years 1896 and 1899 in regard to the technique of local anesthesia, as practiced in my clinic. I shall only remark here that we employ the following solution for infiltration anesthesia:

Cocaain Hydrochlorate.....	0.4 gram	(7½ grains.)
Beta Eucain Hydrochlorate,	0.5 "	(7½ ")
Chloride of Sodium.....	2.0 "	(30 ")
Distilled Water.....	1000.0 "	(32½ ozs.)

"We do not add the morphine as originally recommended by Schleich; for, as is well known, it has no local effect at all and sometimes shows a very undesirable general one. When it is deemed necessary to get an additional morphine effect, we give a subcutaneous injection of 0.01 gram (1-6 grain)of the drug half an hour before. We have employed the methods of Oberst and Hackenbruch exaptly as prescribed by the authors." (Abstracted from the "Archiv fur klinische Chirurgie," Vol. 64, Part 4, Berlin 1901.)

The Treatment of Nasal Catarrh by the General Practitioner.

By Eugene C. Underwood, M.D., Surgeon B. & O. S. W. R. R.; Surgeon K. & I. B. Co., Etc., Louisville, Ky. (Abstract from St. Louis Medical and Surgical Journal, July, 1901).

I have long entertained the view that the general medical practitioner neglects to treat his patients for catarrh and sends them to a specialist when he could successfully manage these himself. In fact, the treatment of catarrh is very simple and the results which follow correct and systematic treatment are very satisfactory. In practice, two forms of chronic nasal catarrh are met. These are hypertrophic rhinitis and atrophic rhinitis.

The hypertrophic form is more generally seen, and is characterized by a thick mucous discharge from the nose, great liability to colds, obstruction of one or both nostrils, which forces the patient to breathe through his mouth, nasal intonation of the voice. There is more or less headache and the sense of smell is impaired. There is dryness of the throat, deafness and other symptoms showing the extension of the disease to neighboring organs. Exostosis of the osseous structures often is seen.

Atrophic rhinitis (ozena) is characterized by a sense of dryness in the nose and throat, a thick, purulent discharge and the expulsion of discovered crusts and an offensive putrid odor. The sense of smell is impaired and the patient is weak and anemic.

The mucous membrane is dry and glazed, but in advanced cases ulceration and necrosis are present.

The treatment consists of applications directly to the diseased area and the administration of such internal remedies as will correct any coexisting disease or morbid state. In some cases where there is occlusion by exostosis the resources of surgery must be invoked.

Let me examine more in detail the treatment of the types of nasal catarrh.

In simple chronic hypertrophic rhinitis the results of treatment will be most flattering. In a case attended with no constitutional disease nothing is necessary beyond having the patient spray the nasal mucous surface with a solution composed of equal parts of water and Hydrozone every three hours.

If the case has persisted some time and the patient has an amount of mucous discharge. I have him take twenty drops of balsalm of copaiba four times daily. The Hydrozone is not only a disinfectant and germicide, but its curative action on the inflamed mucous membranes is speedy and is not equaled by any other drug I have ever used. When the patient is anemic I have him take iron, and any other drug is used when it is called for by any associated disease or morbid condition, but the Hydrozone spray is used in all cases.

In the atrophic variety we shall have to use the same local application. The Hydrozone at once overcomes the offensive odor and takes off the purulent crusts.

These cases must be treated with cod liver oil, iron and such other remedies as will bring up the general health.

Here are a few clinical histories:

Mr. R. H. M., age 60, had been a sufferer for two years. There was no exostosis, but when he had a cold he could breathe only through his mouth. He was in good general health, so I had him buy an atomizer and use a spray composed of equal parts of

distilled water and Hydrozone. He sprayed the mucous surface of the nose every three hours. On this he made rapid improvement and in three weeks had no further symptoms.

S. M. T., age 18, had chronic hypertrophic nasal catarrh in which the mucous discharge was very abundant, and this was associated with dryness of the throat and constant desire to hawk and spit. She used the Hydrozone and water spray, and took fifteen drops of balsam copaiba three times daily. I had the pleasure of seeing this young woman go along to compiete recovery in a period of six weeks.

Mrs. R. J. C., age 49. This lady had atrophic rhinitis and as soon as she came near you the putrid odor asserted itself. Her general health was lowered. I had her use the Hydrozone and water spray and take cod liver oil internally. She spent last winter in Cuba, and has just gotten home greatly improved in general health and her catarrhal disease is better.

She says the spray effectually destroys the disgusting odor and that scarcely any discharge now appears.

I expect to see this patient entirely well in several months.

Excerpts from the remarks made by Dr. Albert C. Barnes, of Philadelphia, at the Second Annual Meeting of the American Therapeutic Society, held at Washington, D. C., May 8, 1901.

The paper of Dr. Reyburn, just read, merely reiterates the well-known fact that petroleum, when administered internally, is not absorbed from the gastro-intestinal tract, but, as is equally well known, a remedy may have the most pronounced physiologic effects purely on account of its mechanical properties. Dr. Robinson, of Philadelphia, states in the Medical News of July 14, 1900: "In over fifty selected cases where nutrition, digestion and body weight were impaired and the purest oil administered in one or two dram doses, 4 times a day for periods of from four to six months, there was in every instance increase in weight and improvement in health, strength and feeling of well-being. The gain in weight was five and a quarter to twenty-three and a half pounds. There was no other change in living conditions or medication which might have caused these improvements."

These clinical effects have been noted and recorded by a number of other observers. The manner in which petroleum accomplishes these results is shown by the laboratory experiments described in detail by the speaker, It was found that the addition of petroleum to albumen digested by an artificial gastric juice under exactly the same conditions as prevail in the human system, very materially hastened and facilitated the process of digestion; it was more rapid and complete than in the same experiment conducted without petroleum. Furthermore, it was shown experimentally that the mechanical influence of petroleum upon the churning, periastaltic movements of the upper portions of the small intestines favorably influenced the processes of abeorption. In view of these experiments, it can be safely concluded that the manner in which petroleum beneficially effects nutrition is by facilitating, expediting and completing the processes of digestion and assimilation of food. Another experiment described by the speaker was that conducted upon a man with marked malnutrition, in which the changes in metabolism were accurately studied for a period of three weeks by feeding the patient upon a normal diet and then determining the daily elimination of nitrogen in the urine and feeces. It was found that under the influence of petroleum the retention of nitrogenous matter in the system was increased- As is well known, the only method of determining the influence of any agent upon nutrition is by determining the daily body elimination of nitrogen in the urine and faeces; if a patient's retention of nitrogen is increased, the most important element of the tissue is conserved, and nutrition is correspondingly improved.

Furthermore, the facts that petroleum passes through the intestines in its original form, and that is a solvent of many remedies administered for their antiseptic and astringent influence upon the intestines indicate a useful field for petrolaum as a vehicle.

Robinson states (ibid): "I have extensively given from five to ten grains of salol in two drams of this oil, four times a day, and reclaimed the oil from the faeces and found it to contain some salol and its components, phenol and salycilic scid. This proves the carrying of a chemical antiseptic and antiferment through the entire canal."

This work has been corroborated by numerous other observers. The speaker stated in conclusion that the bulk of experimental and clinical evidence tends to show that petroleum is entitled to a wider field of application in medicine.

Man, the masterpiece of creation or the climax of evolution, is subject to evelation or degredation by heredity, environment, and acquirement.

The Story of Tongaline.

Composition. Tongaline is composed of Fluid Tonga, Fluid Extract Cimifuga Racemosa and the Salycilates of Sodium, Pilocarpin and Colchicin.

Therapeutic action. Tongaline induces general elimination by its extraordinary stimulating action on the liver, bowels, kidneys and pores, removing promptly and thoroughly all the poisonous and viscid secretions which are the cause of rheumatism, neuralgia, grippe, nervous headache, gout, sciatica, lumbago. malaria, and many diseases of the kidneys and liver.

Salicylic Acid from Natural Oil of Wintergreen. All of the Salicylic Acid in Tongaline is made in our own laboratory from the Purest Natural Oil of Winterngreen, and according to the most eminent medical authorities, this is the only kind of Salicylic Acid which should be taken into the system as the action of the synthetic product is most unreliable, and its use is apt to be attended by very injurious consequences.

Tongaline Tablets (6 grains each). To overcome the difficulties which may arise in the administration of any liquid remedy, as also for convenience of carriage ane administration, Tongaline is presented in the form of Tongaline Tablets, whereby its field of usefulness has been greatly enlarged.

Tongaline and Lithia Tablets (Tongaline 3 grs., Lithium Salicylate 1 gr.). The addition of Lithia to Tongoline presents an ideal combination which does not rely upon its action on the kidneys alone, as is the case when Lithia Salts or Lithia Waters are administered; hence, the kidneys are not compelled to do all the work, but are materially assisted by the powerful eliminative action of Tongaline upon the other emunctories, and the equilibrium of the system is undisturbed.

Tongaline and Quinine Tablets (Tongaline, 3½ grs.; Quinia Sulph., 2½ grs.) Tongaline is a most admirable adjuvant to the action of quinine in many diseases which have periodically as a prominent feature and are accompanied by pain and nervousness.

Tongaline hy Absorption. The internal administration of Tongaline in any one of its forms. as indicated, given at short intervals with copious draughts of pure water, hot preferred, may be supplemented by the local application of Tongaline Liquid. Or, what is very important, the disturbing effects of internal medication udon an irritable stomach and sensitive nerves can be entirely avoided by an external use of Tongaline Liquid alone.

Uniformity. The greatest care is exercised in the selection of all the ingredients of the Tongaline Preparations, which are compounded according to the most improved methods of pharmacy; hence, absolute uniformity is secured, and physician in prescribing the Tongaline Preparations can confidently rely upon "Certain results from certain doses in a certain time."

Substitution. In almost every instance where the expected results have not been secured from the use of Tongaline, it has been found that the genuine preparation was not dispensed. Every physician should therefore protect himself and his patients from worthless substitutes by prescribing Tongaline in original packages, or take great care that his prescriptions are dispensed by honest and reliable druggists.

When you use the Salicylates, prescribe Tongaline. Samples and literatare on application. Miller Drug Co., 2112 Locust Street, St. Louis.

The Treatment of Pulmonary Tuberculosis by Carbonic Acid.

Dr. Hugo Weber, St. Johann, Saarbrucken. After referring to the antagonism between pulmonary tuberculosis and carbonic acid which he pointed out several years ago, the author states that when carbonic acid is present in the lungs in sufficient quantity, the tubercle bacilli cannot develop. In Rokitanski's phthiscal condition the lungs are abnormally large, and the protection which the blood containing carbonic acid offords is not so great as when the same quantity of the acid is conveyed to small lungs; the points of the lungs, too, from their high situation, received little of the impregnated blood, and are therefore most seriously affected by tuberculosis.

During the pregnancy of phthisical woman the disease is arrested, because the organism of the child fosters the production of carbonic acid. Patients suffering from cardiac disease, in whom venous hyperæmia of the lungs exists, are to a considerable extent immune from phthisis, while children borne with pulmonary stenosis all die of consumption. The reason is that because of the contracted pulmonalis the blood containing carbonic acid is sparingly conveyed to the lungs. In case of emphysema, with venous hyperæmia, there is also considerable immunity from tuberculosis,

Furthermore, the success of the sanatoria for consumptives depends to a great extent upon the supply of carbonic acid. The diathetic, physical method applied in these establishments is based on the principle of nourishment, or which is the same thing, an

increase in the production of carbonic acid.

After having cited a number of other observations, the author declares that attention to other phenomena will confirm the soundness of his theory. He thinks, however, that all specialists in the treatment of phthisis will agree with him that success can only be expected when it is possible to remove all disturbances of digestion, and to iscrease the production of carbonic acid by means of nourishment. His endeavor is therefore, in the first placc, to improve the appetite by means of extract of Chinin, Nanning, either by itself or with acid muriatic, and pepsin. In cases of hyperacidity bismuth. subnit. and pepsin, aa 0.5 grm.,, three times a day, may be given for some time. The production of carbonic acid is assisted by the administration of Lævulose, or fruit sugar, which, as Kuelz has shown, is converted in the system in a manner entirely different from other sugars, and for this reason is well borne by diabetic patients. The dosage prescribed is a tablespoonful of Schering's Lævulose four times until cure is effected. As Lævulose is a medium for nourishment rather than a therapeutic agent, it may be taken either before or after meals, or may be used instead of ordinary sugar in the preparation of sweet dishes or beverages, for which it is well suited. According to experiments of L. von Alder and von Clemn in gastric fistula of a dog, it appears that Lævulose is likely to play an important part in the resources of the organism (*vide Therapeatische Monotshefte*. August, 1901). Lævulose has been shown to have a greater binding power on hydrochloric acid than other sugars, and does not contain the disadvantages of sugar of milk, which often produces diarrhœa. It has been proved that the administration of fruit sugar, or Lævulose, the quantity of the gastric juice is increased owing to the reduction of acidity, and therefore it constitutes an important factor in nourishment, and also a powerful digestive medium. It is, therefore, not to be wondered at that, as has been shown in a series of successful experiments on patients in the early stages of tuberculosis, Lævulose alone can be given with the best positive results. Dr. Weber continues:

"In more advanced cases, where cavitation has taken place, Lævulose, or the production of carbonic acid by other means, is not sufficient, and requires to be supplemented by additional treatment. Starting with the supposition that hydrocarbon, when absorbed by the body, is converted into carbon acid and water, I have injected vaseline and paraffinum liquidum into the subcutaneous tissue. I have been enabled to obtain an absolutely pure paraffinum liquidum of which 10 grms. is injected, twice daily, with a serum or syringe. Care should be taken that the needle used for this thick but fluid preparation should be of as large a bore as possible. Of course, the surrounding skin should be thoroughly disinfectected, and the point where the needle enters be protected by an adhesive plaster. I select the back for injections, an proceed for each injection in the following manner: I imagine four lines, of which two are parallel and the width three or four fingers from the vertebral cilumn, running from top to bottom; the other two runs the widith of two or three fingers to the interior from the hind axillary line parallel with it I begin on the right-hand side on the top of the line which runs down by the side of the vertebral column, and inject 10 to 12 c. m. at intervals. Having arrived at the end, I turn to the left side and choose the imaginary parallel line, by the side of the hind axillary line; this being completed, I return to the right side and choose the imagined direction by the hind axillary. The fourth line is that which runs on the left side parallel with the vertebral column. This is repeated until cure is effected, for which usually 200 injections are necessary. I wish to draw particular attention to the fact that these injections are not made under the skin, but under the subcutaneous skin tissue which is lifted with the skin.

"The purest form of paraffinum liquidum is obsained under the description, 'Antiphthisicum.'

"By this combined process—Lævulose internally and Antiphthisicum injections—I have been enabled to cure patients in advanced stages of tuberculosis such as are often met with in ordinary practice. Out of fifty-two cases which were reported in the March number of the Therapeutische Monatshefte of this year, I have cured thirty-two, fourteeen were considerably improved, and only six deaths occurred."

A Dressing for Abdominal Wounds.

Professor R. T. Morris, of New York, whose contributions on abdominal surgery have been of so much value, has for many years made extensive use of aristol in the dressing of abdominal wounds. In his lectures on appendicitis he states that he has replaced iodoform by aristol, which is similar in its action, but is preferable "because it adheres to the tissues much more tenaciously, because it seldom if ever produces any toxic effects, and because it smells better." He believes that while aristol does not act directly as an adtiseptic

it quickly forms with lymph a thin, protecting coagulum, which is almost impenetrable to bacteria, the free iodine which is given off destroying the existing ptomaines. He considers aristol of the utmost importance in closing tissue planes against infiltration from a wouud. Aside from its use as a dressing to the external wound he has found this drug of great service in preventing secondary peritoneal adhesions. Other very prominent surgeons, as for instance Professor Tuttle and De Garmo, have been equally strong advocates of aristol in abdominal surgery, and it is of interest to note that it was recently used in the dressing of the late President McKinley's wound (American Journal of the Medical Sciences). The special advantages of aristol for the treatment of wounds are its remarkable cicatrizing property, its freedom from irritation, and its analgesic action.

The Best Alkaline Wash.*

There are many alkaline preparations on the market that are used daily with varied results in conditions where such preparation is indicated. I have tried most of them in all conditions and after an impartial trial, I am compelled to say that the preparation known as "Glyco Thymoline," made by Kress & Owen Co., stands at the head of the list; its formula is one that would commend its use, the ingredients being of an antiseptic and non-irritating nature.

Having formed this opinion of "Glyso Thymoline," I have concluded to report a few clinical cases where it has given me good results.

Case No. 1. M. L., age 23 years, came under my care suffering with a distressing case of Ozena. The turbinated bones on both sides of her nose presented a condition of marked atrophy; there was a complete loss of smell and taste, and a formation of crusts in the nasal chamber; the stench of same was foul. She complained of continual headache, and other symptoms of a depleted and run down system. I placed her on a tonic of Iron, Arsenic and Strychnia, internally; locally I ordered the use of "Glyco Thymoline" in a Bermingham Douche three times a day diluted. After a month's treatment the crusts had ceased to form; there was a complete restoration of taste and a slight return of smell; the general health improved, and the patient herself well satisfied with results.

Case No. 2.—C. A., age 8 years, came to me suffering with a severe Otorrhea following scarlet fever. There was a mucopurulent discharge from both ears that rendered the child completely deaf; the auditory canal was excoriated and sore, and the general health below par. I used Cod Liver Oil internally, and syringed the ears three times a day with "Glyco Thymoline." At the end of one month the discharge of pus had stopped; the hearing much improved, and the child's general health very much better.

Case No. 3.—J. W., age 25 years came under my care suffering with an aggravated case of cystitis, which had been treated by several of our best physicians, without much improvement. He had great pain in the region of the bladder and the loins, which became worse on urination; a heavy deposit of mucous and some blood in the urine made his condition more distressing; his temperature was 100, which would rise a degree during the periods of pain. I used the usual treatment for such cases without positive results, when I thought of irrigating the bladder with "Glyco Thymoline" (dilute). This I did once in the twenty-four hours, at the same time giving him "Glyco Thymoline" internally in teaspoonful doses every three hours. For the first two days I did not see much improvement, on the third day there was no blood in the urine and less mucous. I continued this treatment for two weeks, when I discharged him cuaed.

Case No. 4.—J. H., age 35 years, consulted me for Pruritus Ani which had troubled him for several years; his business compelled him to sit the best part of the day. He had used various ointments, prescriptions, etc., for this troublesome affection, with only temporary relief. At his first visit I ordered him to bathe the rectum twice daily with castile soap and warm water, then to apply "Glyco Thymoline" half strength to the parts. After persisting for a time, the swelling and severe itching was lessened, and then left him altogether.

A Specifice in Catarrh.

The real and doubtful remedies in this ubiquitious diseases are positively legion, and if Germiletum did not possess exceptional and specific scientific merits which will at once command the attention of the thoughtful, we should hesitate to mention catarrh. That bugbear of the medical profession. It is well knowh that the saliva, lachrymal secretions, and most of the secretions, of the upper alimentary and respiratory passages are alkaline in character, the saliva markedly so. Germiletum, being slightly alkaline (no acid reaction) and so

*W. Harpur Sloan, M.D., Chief Ear Department, Medico-Chirurgical College, Philadelphia, Pennsylvania.

strongly antiseptic its special utility is conceded. The experimental and clinical observations on these lines so fully confirm anticipations that a faithful and impartial trial of Germiletum is only requested to demonstrate its superiorty, whether in nasal, aural or pharyngeal catarrh. Manifestly all forms are due to the ravages of micro-organisms. Germiletum effectuslly kills germs, while Nature only restores the normal state. Use one part Germiletum to six parts of warm water as a wash, gargle or with an atomizer, three or four times a day.

The Antikamnia Chemical Company's New Laboratory.

Frank A Ruf, President and Treasurer of The Antikamnia Chemical Company has just purchased a lot 80x109 feet, on the northwest corner of 22nd and Pine Street, for $20,000.00 cash, on which his Company will begin the erection, early in spring of a new "Antikamnia Laboratory," five stories high, covering the entire lot. The improvements will cost about $45,000.00 irrespective of the laboratory apparatus and appliances which will be of most approved pattern, fron Darmstadt, Ghrmany. The offices and various departments will be fitted with all modern conveniences, making the whole plant one of the most complete Specialty Lacoratories in the United States.

The Antikamnia Chemical Company is is one of America's if not the world's best known Pharmaceutical concerns and justly so. Energy, enterprise and push, backed up by the judicious and liberal use of printer's ink, in keeping their line of preparations in touch with the medcial profession, from one end of the universe to the other, have made it so.

Bromide and Iodide of Strontium in Basedows' Disease.

The bromide and iodide of strontium have fully justified Professor Laborde's high opinion of them when first experimented with by him, and they are now taking the place of the corresponding salts of potassium and sodium, and are largely ordered by the younger and more progressive physicians.

They are free from untoward effects on the heart, and do not derange the stomach as the potassium salts do: they produce more energetic effects than salts of sodium.

A. Lockhart Gillespie has recently used them with success in the treatment of Basedow's disease in children, and finds that the morbid symptoms yield to this medication without signs of iodism or bromism. Both iodide and bromide of strontium are very soluble and more palatable than the potassium or sodium salts. The swollen condition and pulsations of the thyroid gland are very rapidly absorbed, the high pulse diminishes and the accelerated cardiac palpitations tend to disappear.

As strontium can hardly be said to exist in the human economy, Dr. A. Lockhart Gillespie finds smaller doses are required than with potassium or sodium salts, and in Basedow's disease in children, 12 grains of bromide and 6 of iodide of strontium, three times a day seem to be sufficiently large doses. It is of the greatest importance that pure strontium salts be used; hence it is desirable that only the chemically pure salts made by the Paraf-Javal process be prescribed. These are the salts used in the original experiments of Dujardin-Beaumetz, Germain See, Constaine Paul, Fery and others, and in their reports to the French Academy speeial stress was laid on the importance of using these pure salts, in order to insure uniform therapeutical results, free from all danger of poisoning from the traces of the toxic barium, and sodium and potassium impurities.

The standard solution of Iodide, (30 grains to the fluid ounce) Bromide, (60 grains to the fluid ounce) and Lactate (60 grains to the fluid ounce) are made only with the Paraf-Javal Strontium Salts, and are above suspicion.

Agents—E. Fougera & Co., New York.

D. S. Maddox, M.D., United States Examining Surgeon, Coroner Marion Co., Ohio, says: (Medical Brief). For the control of pain opium is and always has been the sheet anchor. But opium, pure and simple has many disadvantages which render its use in some cases positively harmful. Opium is one of the most complex substances in organic chemistry, containing, according to Brunton, eighteen alkaloids, and an organic acid. The ordinary alkaloids, of which morphia is the chief, have the same objections as the crude drugs. They constipate the bowels, derange the stomach, and worst of all, induce a habit which utterly destroys the moral and physical nature of the individual. While looking about me for some agent which would produce satisfactory anodyne and hypnotic results without the deleterious and pernicious after-effects of opium and its ordinary derivatives, I came upon the preparation known as papine. After a somewhat extended trial of this remedy I am convinced that it is the ideal anodyne. Although derived from the Papaver Somniferum it is singularly free from the objec-

tions of the ordinary opiates. It does not constipate; it does not derange the stomach; it does not cause headache; it does not induce any drug habit; it is safe and may be given to children as well as adults.

Complete Succees in Menstrual Nervousness.

I used Neurilla recently in a case of a neurasthenic women about thirty-five years of age. She having suffered for several years past, eepecially during menstrual periods—at times becoming hysterical. I prescribed Neurilla to be given in teaspoonful doses six times daily. This way kept up for one week; since, she has taken it in teaspoonful doses three times daily, and during her last illness, she stated to me in an interview on the subject, that she felt not the least symptoms of nervousness. I am prescribing this preparation of Neurilla in other similar cases with complete success.

R. L. Cornwell, M.D., Ph.D.
Montague, Mich.

Treatment of Chronic Bronchitis.

By M. K. Sturdivant, M.D.

Bronchitis is an inflammation of the bronchial tubes; it is a local disease and it is usually confined to the larger bronchial tubes, but in an acute attack it may extend to the smaller bronchial tubes and produce a capiliary bronchitis, which is a very fatal disease to young children in the acute form of this disease, or it may extend and invade the substance of the lungs and we then have a broncho pneumonia in the acute form of this disease. Bronchitis is, as I have said above, usually a local disease and is confined to the larger bronchial tubes. It is not necessary for the trachea or the smaller bronchial tubes to be affected. Bronchitis may be produced from cold or any irritating substance that passes over the bronchial tubes or from a scrofulous diathesis.

I will now state to The Charlotte Journal, or to the readers of this Journal, that I have undergone this disease and I am really of a scrofulous diathesis. I took a great many drugs for this disease, and among the number I took the comp syrup of the Hypophosphites Fellows three times per day before meals and the syrup of hydriodic acid three times per day, between meals and at bed-time and, of course, this course of medicine helped me some, but it would not eradicate the disease. Finally, upon the advice of my friend, Dr. T. H. Stalcup, of Jefferson, Texas, I took the following:

℞ Iodide potash, 3v.
Succus alterans (Lilly) ℥vj.
Mix. sig.

Take one teaspoonful three times per day before meals, and I also, in connection with the above, took the following: ℞ Phillip's Emulsion of cod-liver oil with wheat phosphates, one teaspoonful three times per day, between meals and at bed-time. I also added to each dose of the above cod-liver oil from 2 to 4 drops of beechwood creosote in milk or sweetened water.

The above treatment did the work for me, although I had to take several bottles of the iodide of potash in the succus alterans, Lilly, as above.

Now, in the conclusion of this article, I desire to state to the readers of your most excellent Journal, that if they will try this treatment on their cases of bronchitis that I believe they will be perfectly satisfied with the treatment. In consumption of the bronchial tubes I do not think the treatment would have any effect, no more than it would upon a genuine case of consumption.

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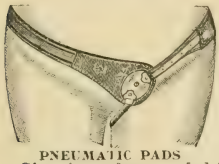

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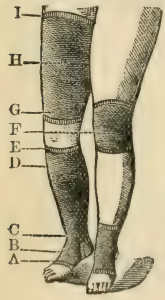

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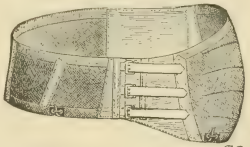

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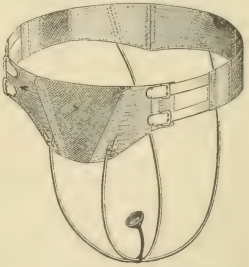

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Warwick on the Knobs. A Story of Stridgtown Coun-

Dr. Hugh Weber, of St. Johann-Saarbriicken, writes in "Medico," (Berlin., Sept 4th, 1901) "On the Treatment of Tuberculosis of the Lungs by Means of Carbonic Acid," and shows that all recognized methods of handling the diseases are finally dependent upon it. Besides the various nutrient and therapeutic measures which he recommends he lays especial stress upon increasing carbonic acid production by the administration of Levulose, which is oxidized in the body much more completely than any other sugar, and hence is well borne by diabetic patients also. He administers a heaping tablespoonful of Schering's preparetion four times. And since Levulose is a nutrient rather than a medicine, it does not matter whether it is taken before or after eating, or with the food and drink. The classical investigations of L. von Aldor and Clemm (Therapeutische Monatsherfts, Aug. 1901) have shown that fruit sugar or Levulose increases the amount of gassric juice whilst diminishing its acidity; hence it is not only a most excellent nutrient, but actually aids and stimulates digestion. No wonder, he says, that he has been able to cure a whole series of cases in the initial stage of phthisis pulmonum with this medication alone. In advanced stages of tuberculosis, where cavitation had occurred, Levulose or the production of carbonic acid by any ordinary means alone was not sufficient, and Weber employed hypodermic injections of chemically pure liquid paraffine, with the idea that then hydrocarbon, when absorbed by the body, would be converted into carbonic acid and water. By this combined process, Levulose internally and paraffine injections, he has been enabled to cure patients in advanced stages of tuberculosis, such as are often met with in ordinary practice. Out of the fifty-two cases which were reported in the March number of Therapeutische Monatesshefte of this year, he cured thirty-two, fourteen are considerably improved, and only six have died.

Dr. Mills Elected Professor of Nervous Diseases of Penn's Medical School.

Dr. Charles K. Mills, who recently resigned his professorship of Mental Diseases and of Medical Jurisprudence at the University of Pennsylvania has been elected to the chair of Clinical Professor of Nervous Diseases in the same institution.

Dr. Mills graduated from the Medical Department of the University of Pennsylvania in 1869, and two years later also received a Ph.D. Degree. He has been actively engaged in practice since, and is a noted specialist on Nervous Diseases. He has occupied many important positions in hospitals and medical schools, and has written much on medical subjects, his principal work being a treatise on the Nervous System and Its Diseases.

Dr. Cummings advocates the introduction of small pieces of ice into the rectum in the treatment of norcotic poisoning. He claims to have seen cases of morphine poisoning quickly relieved where ice had been introduced, but as atropine and other measures were used at the same time it was difficult to attribute all of the benefits to the ice. He reports, in Merck's Archives, a case of chloral poisoning, and a case of asphyxia from coal gas, where prompt relief followed immediately upon the introduction of ice into the rectnm.